Traceable® Products

Fisher Scientific

Over 30 NEW products for the laboratory



Traceable® Products

ISO 17025 Calibration laboratory

All Traceable® products are provided with a Traceable® Calibration Certificate from an ISO 17025 calibration laboratory. Timer, thermometer, hygrometer, barometer, tachometer, gauge pressure, differential pressure, scale, balance, conductivity cell, conductivity solution, conductivity meter, UV light meter, light meter, and calliper certificates are accredited by the American Association for Laboratory Accreditation (A2LA).

A2LA is widely recognised internationally through bilateral and multilateral agreements and through its participation in the International Laboratory Accreditation (ILAC) and Multilateral Recognition Arrangement (MRA). Through A2LA Accreditation, Traceable® Certificates are internationally recognised by Accreditation Agencies and Services in over 75 countries throughout Europe, the Middle East, North America, South America, Asia, and Africa.

Traceable® Certificate indicates the product is traceable to standards provided by the National Institute of Standards and Technology (NIST), a U.S. Government agency within the Commerce Department. The Traceable® Certificate complies with ANSI/NCSL Z540-1.

Certified Reference Materials, ISO Guide 34

ISO Guide 34 provides the highest achievable level of quality assurance, documentation, and accuracy for chemical standards. All standards are directly traceable to NIST (National Institute of Standards and Technology) and/or a National Standards Laboratory.

Certified Reference Materials (CRM) are produced in an accredited manufacturing facility, an ISO Guide 34 Accredited Certified Reference Material (CRM) Producer. Additional certifications include ISO 31 (certificate content) and ISO 35 (statistical analysis). ISO Guide 34 Certified Reference Material (CRM) Producer is accredited by American Association for Laboratory Accreditation (A2LA Certificate No. 1750.02).

ISO 9001 Quality Certified

All products are provided from an ISO 9001 Quality Certified Company. This quality certification provides users with the assurance that they receive only the finest and most reliable products. It is worldwide recognition of superb quality for innovative electronic products. ISO 9001 Certification insures that every product is checked and rechecked to provide for absolutely the highest quality. In addition, ISO 9001, in contrast to other ISO 9000 certifications, requires that the design phase of every product be included in the quality requirements. The 9001 certification provides that quality is designed into every product beginning with the first drawing. All products are produced under ISO 9001 and certified by DNV (Det Norske Veritas.)

Traceable® is a registered trademark of Control3.

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Through A2LA Accreditation, Traceable® Certificates are internationally recognised by the following Accreditation Agencies and Services in these countries:





Traceable® Digital Thermometer



Traceable® Digital Thermometer reads to 0.001°

Scientific thermometer is ideal for critical experimental requirements, quality control, and routine measurements. Unit reads in °C and °F. Expanded temperature range covers –58.000 to 302.000°F and –50.000 to 150.000°C. Resolution is 0.001°. Accuracy is ±0.05°C between 0.0 to 100°C.

Unit conforms to ITS-90, International Temperature Standard

Instant MEMORY key recalls minimum and maximum readings over any time period. HOLD key freezes display for reading later. For ease in reading, one key changes the display to show one, two, or three significant numbers after the decimal point. Internal data logger captures the minimum and maximum temperatures every hour for 24 hours. Monitor shows exactly when a reading occurred. High precision makes unit ideal for measuring temperatures in cuvettes, gas systems, reagents, chemical solutions, soil, water baths, ovens, incubators, pharmaceuticals, petroleum products, foods, and wastewater. Designed for years of reliable service even in severe environments. Large, 12.7 mm-high, bright, high-contrast LCD makes the thermometer easy to read.

Lightning-fast temperature changes

The fast-response probe supplied with the unit displays even the slightest temperature change instantly. Readings are updated three times a second. Universal, stainless-steel probe is triple purpose for liquid, air/gas, and semisolids. Accurate readings with tip penetration of 8.4 mm. Probe has a diameter of 3.2 mm, stem length of 160 mm, an overall length of 230 mm and a cable length of 1.5 meters.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 89 x 140 x 32 mm. Weight: 226.8 g. Supplied: probe, battery, plastic carrying case, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Digital Thermometer	15-077-8
Fisher Scientific Replacement Probe for Cat. No. 15-077-8	15-077-7
Accessory Probes for 15-077-8	
Fisher Scientific Air Probe	15-077-9C
Fisher Scientific Micro Probe	15-077-9A
Fisher Scientific Surface Probe	15-077-9B
Accessories	
Data Acquisition System (description on page 96)	15-077-71
Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76



Computer Output



Air Probe

Measures air temperatures. Dimensions: 0.3 cm diameter, 10 cm stem length, 15.25 cm overall length, 183 cm cable length.



Micro Probe

Stainless-steel, 0.1 cm diameter, 7 cm stem length, 14 cm overall length, 152 cm cable length.



Surface Probe

Measures surface temperatures. Dimensions: 0.8 cm disk diameter, 9 cm stem length, 15.25 cm overall length, 178 cm cable length.



Traceable® Platinum Ultra-Accurate Digital Thermometer



Platinum sensor insures linear response and high accuracy across the entire range. Range: -200.00 to 500.000°C (-328.00 to 932.000°F). Resolution: 0.001° or 0.0001°. Accuracy: ±0.05°C between -80 to 250°C. High-precision unit is designed for years of reliable service even in the most severe environments. Thermometer is ideal for foods, pharmaceuticals, petroleum products, wastewater, gas systems, soil, ovens, and electronics manufacturing. Membrane keys are splash-proof and easy to operate. Decimal-placement key changes display to show one, two, three, or four significant numbers after decimal. Internal data logger automatically captures Min/max readings every hour for last 24 hours. Instant response probe updates readings 3 times per second for liquids, air/gas, semi-solids. HOLD allows user to freeze display for reading later. Computer output allows readings to be captured in real time.

Handle Probe Model: fast-response, 4-wire, platinum, waterproof, stainless-steel probe. Handle probe: 3.3-mm diameter x 160 mm stem length, 228 mm overall, 1.5 metre cable, waterproof, for liquids, air/gas, and semi solids with readings at tip penetration of 7.6 mm. Bullet™ Probe Model: fast-response, 4-wire, platinum, waterproof, stainless-steel. Bullet™ probe: 6.3 mm diameter x 25.4 mm long, with high temperature (500°C) 3 metre cable, waterproof, for liquids, air/gas, and semi solids.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 88 x 139 x 31.7 mm. Weight: 226.8 g. Supplied: battery, platinum probe/cable, plastic carrying case, Traceable® Certificate.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Platinum Ultra-Accurate Digital Thermometer	Stainless-steel with handle	15-081-102
Fisher Scientific Traceable® Platinum Ultra-Accurate Digital Thermometer	Bullet™	15-081-103
Accessories	·	•
Replacement Handle Probe Platinum stainless		15-081-104
Replacement Bullet™ Probe Platinum stainless		15-081-105

Traceable® Extra-Extra Long-Probe Waterproof Thermometer

Extra-long probe, 50 cm created for deep vessels. Thermometer is ideal for placing in large beakers/flasks, vats, pails, and drums. Applications include foods, pharmaceuticals, and industrial plants. Waterproof (IP67) to a depth of 3 m meter/probe/cable. Jumbo LCD can be read at 21 metres. Accurate readings with tip penetration of only 25.4 mm. Stainless-steel spring-powered holder for ease in placing probe anywhere. Wall mount provides instant viewing, indoor/outdoor use.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Range: 14.0 to 230.0°F (-10.0 to 110.0°C). Resolution: 0.1°. Accuracy: ± 1 °C. Probe: waterproof, stainless-steel, 50 cm length x 5 mm diameter. Probe handle: waterproof, chemical-resistant, length 63.5 mm. Waterproof cable length: 3 metres. Probe holder: stainless-steel, spring-loaded clamp, rugged construction. Size: $120 \times 84.5 \times 31.7$ mm. Weight: 198 g. Supplied: stainless-steel probe, stainless-steel spring-loaded holder, wall mount, batteries, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Extra-Extra Long-Probe Waterproof Thermometer	15-081-101





Traceable® Platinum High-Accuracy Freezer Thermometer

Thermometer displays minimum/maximum temperatures for previous 24 hours (for each hour) and previous 7-days (for each day); or previous 30 days (for each day). Time/Date stamp key shows the exact time and date for all minimum and maximum readings. Range: —148.00 to 199.99°F (—100.00 to 199.99°C). Resolution: 0.01°. Accuracy: ±0.1°C. Thermometer is ideal for freezers. Triple display shows current °F/°C and minimum/maximum temperatures. Alarm is settable in 0.1° increments and signals when temperature rises above/falls below set points. Visual LEDs and audible alarm signal continuously even if temperature returns to non-alarm range. A 4-wire platinum sensor insures linear response and high accuracy across the entire range.

Supplied platinum waterproof stainless-steel probe provides accurate readings with tip penetration of 7.6 mm, waterproof cable, and adjustable probe holder. Handle probe model features stainless-steel probe, diameter 3.3 mm, stem length 228 mm, overall length 304 mm. Both models feature a 3 metre waterproof cable.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 69.8 x 107 x 19 mm. Weight: 255 g. Supplied: platinum probe/cable, bench stand, wall mount, batteries, Traceable® Certificate.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Platinum High-Accuracy Freezer Thermometer (patents pending)	Stainless-steel with handle	15-081-108
Fisher Scientific Traceable® Platinum High-Accuracy Freezer Thermometer (patents pending)	0.47 mm diameter x 19 mm long	15-081-109

Traceable® International Standards Extreme-Accuracy Digital Thermometer





Four Traceable® International Standards Digital thermometers provide the exact readings required for critical requirements, quality control checks, and routine measurements. Units read 0.00, 25.00, 37.00, or a combination of all three with a resolution of 0.01° and an accuracy ±0.05°C within ±2°C of standard. Units read in °C and °F. Stainless-steel probe shows the slightest temperature change. Probe is triple purpose for liquid, air/gas, and semisolids. Probe: 3 mm diameter, stem length of 158 mm, overall length of 228 mm and a cable length of 1.5 m.

High-precision unit is ideal for measuring temperatures in water baths, cuvettes, gas systems, reagents, standards solutions, ovens, incubators, pharmaceuticals, petroleum products, foods, and wastewater.

Records time and date for min/max readings and hi/lo alarm alerts

Display shows minimum/maximum and current temperatures. Min/max monitors readings overnight, on weekends, or for any time period and displays the exact time and date when the min/max temperature occurred. Alarm provides two visual (LEDs) and two audio alerts when temperature rises above or falls below high and low set points. Unit displays the exact time and date when dual thermometer alarms are triggered. Alarms are programmable in 0.1° increments. Visual and audible alarms signal continuously even if temperature returns to non-alarm range. First thermometer ever designed to permit user one-key calibration. To assure accuracy an individually



serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). High-impact, chemical-resistant ABS plastic case is 69.8 x 107 x 19 mm. Weight: 141 grams. Supplied: stand, Velcro®, magnetic strips, and wall mount, stainless-steel probe, Traceable® Certificate, batteries.

Description	Range	Cat. No.
Fisher Scientific Traceable® International Standards Extreme-Accuracy Thermometer 0.00°	0.00°	15-078-178
Fisher Scientific Traceable® International Standards Extreme-Accuracy Thermometer 25.00°	25.00°	15-078-179
Fisher Scientific Traceable® International Standards Extreme-Accuracy Thermometer 37.00°	37.00°	15-078-180
Fisher Scientific Traceable® International Standards Extreme-Accuracy Thermometer 0°, 25°,37°	0.00°, 25.00°,37.00°	15-078-181



Traceable® Extreme/High-Accuracy Thermometers

New High-Accuracy Traceable® Thermometer reads to 0.01 degrees

Thermometer range is -58 to $158^\circ F$ and -50 to $70^\circ C$ with a resolution of 0.01° and accuracy of $\pm 0.3^\circ C$. Unit reads in $^\circ C$ and $^\circ F$. Traceable International Standards Digital Thermometer provides the exact readings required for critical requirements, quality control checks, and routine measurements. Two channel thermometer is available with one probe or two probes. Two probes are useful in monitoring inlets and outlets; tracking two unique tests simultaneously; and measuring temperatures in two locations. Absolute high-precision thermometer is ideal for measuring temperatures in water baths, cuvettes, gas systems, reagents, incubators, pharmaceuticals, petroleum products, foods, wastewater, and when using pH/conductivity standards.

Records time and date for Min/max readings and hi/lo alarm alerts

Display shows minimum/maximum and current temperatures. Min/max monitors readings overnight, on weekends, or for any time period. It displays the exact time and date when the Min/max temperature occurred. Alarm provides two visual (LEDs) and two audio alerts when temperature rises above or falls below high and low set points. Unit displays the exact time and date when dual thermometer alarms are triggered. Alarms are programmable in 0.1° increments. Visual and audible alarms signal continuously (for days) even if temperature returns to non-alarm range. First thermometer ever designed to permit user one-key calibration.



Impervious stainless-steel probe

Stainless-steel probe supplied with units shows the slightest temperature change. Probe is triple purpose for liquid, air/gas, and semisolids. Accurate readings with tip penetration of 8.3 mm. Probe has a diameter of 3 mm, stem length of 158 millimetres, overall length of 228 mm and a cable length of 1.5 metres. To assure accuracy an individually serial-numbered Traceable® Certificate is provided by an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 69.8 x 107 x 19 millimetres. Weight: 141 grams. Supplied: stand, Velcro®, magnetic strips, wall mount, Traceable® Certificate, stainless-steel probe(s), batteries.

Description	Range	Cat. No.
Fisher Scientific Traceable® High-Accuracy Dual Thermometer (1 stainless-steel probe supplied)	–58 to 158°F and –50 to 70°C	15-078-250
Fisher Scientific Traceable® High-Accuracy Dual Thermometer (2 stainless-steel probes supplied)	–58 to 158°F and –50 to 70°C	15-078-251



Traceable® Mini-Thermometer



So easy—no instructions needed

Business-card size is perfect to carry anywhere. Fits in tool kit, briefcase, or coat pocket. Small but powerful unit displays from -58 to $302^{\circ}F$ and -50 to $150^{\circ}C$, with a resolution of 0.1° between -20 and 200° . Accuracy is $\pm 1^{\circ}C$ between -20 to $100^{\circ}C$.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Easy-to-read digits are 9.6 mm-high. Stainless-steel probe (3.5 mm diameter x 177 mm length) is resistant to most chemicals. Cable (4.5 cm length) wraps into a slot around unit and probe clips to unit for easy storage. Size: 76 x 50 x 12.7 millimetres. Weight: 28.3 g. Supplied: Traceable® Certificate and battery.

Description	Cat. No.
Fisher Scientific Traceable® Mini-Thermometer	15-077-32





Traceable® Kangaroo™ Thermometer



Traceable Kangaroo™ Thermometer carries the 106 cm probe-cable in a reel-compartment pouch in the back of the unit. Perfect carry-around unit fits in any pocket, or use the convenient flip-open stand.

Intuitive, never-read-the-instructions operation allows every user to record identical results. Range: -58.0 to $572^{\circ}F$ and -50.0 to $300^{\circ}C$. Resolution: 0.1° (between -19.9 to 199.9) otherwise 1°. Accuracy: $\pm 1^{\circ}C$ (between -30 and $250^{\circ}C$) otherwise $\pm 2^{\circ}C$. Unit automatically captures and recalls minimum and maximum temperature readings over any time period. High and low alarm may be programmed in 1° increments. Alarm sounds every minute until temperature returns to non-alarm condition. HOLD key freezes the display to record a current reading.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Stainless-steel probe: 3.5 mm diameter x 190 mm length. Supplied: probe, Traceable® Certificate, and battery. Large 19 mm digits are readable from 6 metres. Compact size: 63 x 120 x 12.7 millimetres. Weight: 69.8 g.

Description	Cat. No.
Fisher Scientific Traceable® Kangaroo™ Thermometer	14-649-79

Traceable® Digital Thermometer



At the touch of a key, display temperatures from -58.0 to 500.8°F and -50.0 to 260.0°C, switch from °F to °C, or set high/low alarms.

Ideal for all solutions

This is the thermometer to use in foods, soils, cuvettes, water baths, wastewater, and incubators. Resolution is 0.1° and accuracy is $\pm 1^{\circ}$ C. Thermometer monitors temperature around the clock. Single battery runs continuously for 1 year. Display (12.7 mm) is readable from 3 metres. Both a high and low alarm may be programmed in 1° increments. When temperature rises above or falls below set points, a 1-minute audible alarm signals an out-of-range condition. Alarm automatically resets when temperature returns to in-range reading. Alarm mode may be switched off when not required. Timer counts down from 99 hours, 59 minutes and may be set in 1-minute increments. When zero is reached, a 1-minute alarm sounds, and display flashes until a key is pressed.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Probe clips to unit for handy storage. Stainless-steel probe has a diameter of 3.5 mm, a length of 184 mm, and a cable length of 1 metre. Size: 50 x 101 x 12.7 mm. Weight: 85 g. Supplied: flip-open stand, probe, battery, and Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Digital Thermometer	15-077-8A



Traceable® Memory/Waterproof Thermometer

Versatile panel-mount module snaps into place or is stand-alone unit. Comes complete with stainless-steel probe featuring an extended 3 metre cable and easy-to-grab handle.

Easy-view, four-digit LCD is 19 mm-high

Records minimum and maximum memory readings over any time period. Temperature range encompasses virtually all testing requirements: -58 to 572°F and -50 to 300°C. Resolution is 0.1° from -20 to 200°; 1° outside this range. Accuracy is ± 1 °C between -20 and 100°C. Reading updates every second.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Dimensions: 120 mm-height; 82.5 mm width; 25.4 mm. Probe diameter 4.8 mm; probe length (including handle) 190 mm; cable length 3 metres. Supplied: Traceable® Certificate, probe, cable, and battery.

Description	Cat. No.
Fisher Scientific Traceable® Memory/Waterproof Thermometer	14-648-46







Traceable® Waterproof Thermometer



Here's the perfect thermometer for wet areas. Case is waterproof and shockproof. Use for monitoring of liquids, air/gas, or semisolids in freezers, water baths, incubators, and refrigerators. Stainless-steel probe is resistant to most laboratory chemicals.

Wide temperature range

Wide range covers 99 percent of the lab's routine temperature measurements: Range is −58 to 572 °F and −50 to 300°C with a resolution of 0.1° from −19.9 to 199.9° (otherwise 1°). Accuracy is ±1°C between −20 and 100°C. Ultra™ model accuracy is ±0.4°C at tested points. Easy-view 6.3 mm-high LCD digits.

Records minimum/maximum readings

At the touch of a key, memory recalls highest and lowest temperature readings over any time period. Reading updates every second. Solid-state construction eliminates dangers inherent in breakable glass and toxic mercury thermometers. Thermometer operates in rugged conditions and outdoors. Waterproof construction is ideal for wet labs, wash-down areas, and virtually all field applications. Unit is engineered to be shockproof in drop tests up to 1.5 m. Stainless-steel, 120 mm long, 3.5 mm diameter probe, 3 metre cable, and digital-display case are all waterproof. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST. Supplied: suction cups, magnets, Velcro®, Traceable® Certificate, battery. Size: 44 mm dia. x 12.7 mm depth. Weight: 56 g.



Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Waterproof Thermometer with probe/cable	±1°C	15-077-9E
Fisher Scientific Traceable® Ultra™ Waterproof Thermometer with probe/cable	±0.4°C at tested points	02-402-0

Traceable® Snap-in Module with Probe



Versatile panel-mount module snaps into place or is stand-alone unit. Comes complete with stainless-steel probe featuring an extended 3 m cable and easy-to-grab handle.

Easy-view, four-digit LCD is 19 mm-high

Records minimum and maximum memory readings over any time period. Temperature range encompasses virtually all testing requirements: -58 to $572^{\circ}F$ and -50 to $300^{\circ}C$. Resolution is 0.1° from -20 to 200° ; 1° outside this range. Accuracy is $\pm 1^{\circ}C$ between -20 and $100^{\circ}C$. Reading updates every second.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Dimensions: $38 \times 61.9 \times 12.7$ mm. Probe diameter 3.5 mm; probe length (including handle) 69.8 millimetres; cable length 3 metres. Supplied: Traceable® Certificate, probe, cable, and battery.

Description	Cat. No.
Fisher Scientific Traceable® Snap-in Module with Probe	15-077-943







Traceable® Full-Scale Thermometer



Readings are updated every second and displayed on a 9.6 mm LCD. Magnetic back allows for placement on a metal surface (incubators, freezers, water baths). Unit also incorporates flip-open stand for use on lab bench and spring fastener for clipping to any edge. Stainless-steel probe with piercing tip allows constant exposure to extreme temperatures at the ends of the range.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Full-Scale Thermometer model resolution is 0.1° from –20 to 200° and 1° elsewhere.

Plus mode

Resolution is 0.1° from –20 to 200° and 1° elsewhere. Plus model also includes the following features: high/low alarm, minimum/maximum memories, and hold. Dimensions: Thermometer diameter 53 mm and 14.2 mm depth; probe length 146 mm and 3.5 mm diameter; 3 metre cable length. Supplied: Traceable® Certificate and battery.

Description	Range	Accuracy	Cat. No.
Fisher Scientific Traceable® Full-Scale Thermometer	−58 to 500°F (−50 to 250°C)	±1.0°C between –20 to 100°C	15-077-23
Fisher Scientific Traceable® Ultra™ Full-Scale Thermometer	–58 to 500°F (–50 to 250°C)	±0.5°C at tested points	15-077-940
Fisher Scientific Traceable® Full-Scale Plus Thermometer	–58 to 572°F (–50 to 300°C)	±1.0°C between –20 to 100°C	06-664-36
Fisher Scientific Traceable® Ultra™ Full-Scale Plus Thermometer	–58 to 572°F (–50 to 300°C)	±0.5°C at tested points	06-664-34



Traceable® Alarm Thermometer/Alarm Timer



Unique thermometer/timer with alarms is perfect for monitoring liquids, air/gas, or semisolids. Measure in $^{\circ}$ F or $^{\circ}$ C with a range of 32 to 392 $^{\circ}$ F and 0 to 200 $^{\circ}$ C. Resolution is 1 $^{\circ}$ and accuracy is $\pm 2^{\circ}$ C. Triple display simultaneously shows time remaining to zero, probe temperature, and temperature alarm setting. Large, 38 x 50 mm LCD may be read from 2.7 metres away. Two distinctive alarms signal time and temperature.

Alarms for temperatures and time

Temperature alarm may be set in 1° increments. A five-minute alarm sounds continuously when temperature rises above set point. Alarm continues for 5 seconds every minute until switched off or temperature falls below set point. Timer counts down from 24 hours and may be set in 1-minute increments. When zero is reached, a 1-minute alarm sounds, Time's Up flashes, and timer begins counting up. For repetitive times, a memory recalls previous setting. Intuitive controls are front-mounted. Viewing angle is adjustable. Fold-back display panel and magnets on back permit vertical mounting.

Metal cable for ovens

Detachable, curved stainless-steel probe has a 6.3 mm diameter and 215 mm length. Metal cable (1 m) may be placed in an oven or incubator. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST. High-impact, chemical-resistant ABS plastic base: $69.8 \times 76 \times 12.7$ millimetres. Weight: 120 g.

Description	Cat. No.
Fisher Scientific Traceable®Alarm Thermometer/Alarm Timer	15-077-29



Traceable® Waterproof/ **Food Thermometer**

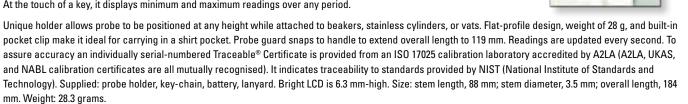


Traceable® Waterproof/Food Thermometer's membrane keys, ABS body, and stainless-steel probe make it ideal for food labs, food processing, food preparation, and brewing. Waterproof construction allows it to be used in labs, plants, wash-down areas, and the field. Unit eliminates the dangers inherent in breakable glass and toxic mercury thermometers.

Range is -58 to 572°F and -50 to 300°C, resolution is

0.1° from -20 to 200° (1° otherwise), and accuracy is ±1.5°C. Ultra™ model accuracy is ±0.4°C at tested points.

At the touch of a key, it displays minimum and maximum readings over any period.



Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Waterproof Food Thermometer with holder	±1.5°C	14-649-100
Fisher Scientific Traceable® Ultra™ Waterproof Food Thermometer with holder	±0.4°C at tested points	14-649-101

Traceable® Robo™ Thermometer



Adjustable for ultimate viewing

Rotating digital display (180 degrees) makes for easy reading at any angle. Position the readout at a right angle for a heads-up display or straight to view sample and temperature simultaneously. Read temperatures in reagents, water baths, foods, air, and any semisolid. Extrawide range covers from -58 to 536°F and -50 to 280°C. Press a key to change between Fahrenheit and Celsius. Enjoy digital resolution of 0.1° from -20 to 200°. Accuracy is ±1°C between -20 and 100°C. Ultra™ model accuracy is ±0.4°C at tested points. Readings are updated every second. Stainless-steel probe is resistant to most laboratory chemicals. Long stem allows for stirring solutions.

Replaces mercury thermometers

Plastic and stainless-steel construction (no glass or mercury) makes it safer than mercury thermometers. It is virtually indestructible and stores flat in a pocket.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Large, bright LCD digits are 6.3 mm-high. Stem dimensions are 203 mm length and a diameter of 3.5 mm. Overall unit length is 241 millimetres. Weight: less than 28 g. Supplied: battery and Traceable® Certificate.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Robo™ Thermometer	±1.0°C	15-077-54
Fisher Scientific Traceable® Ultra™ Robo™ Thermometer	±0.4°C at tested points	06-664-32







Traceable® Long-Stem Thermometer



Replaces mercury and glass thermometers

Perfect-sized unit fits into flasks, cuvettes, test tubes, and beakers. Read temperatures in foods, gases, samples, reagents, water baths, and semisolids. Stainless-steel probe is resistant to most laboratory chemicals. Long stem allows user to make measurements while stirring solutions in deep vessels. Displays -58 to 572° F and -50 to 300° C. Resolution is 0.1° from -20 to 200 (1° outside this range). Accuracy is $\pm 1^{\circ}$ C between -20 to 120° C. Ultra^m model accuracies are ± 0.2 and $\pm 0.5^{\circ}$ C at tested points. Readings are updated every second.

Eliminates mercury

ABS plastic and stainless-steel construction (no glass or mercury) makes it safe. Brilliant LCD is 6.3 mm-high. Designed for all ovens and incubators.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Case is made of rugged ABS plastic, diameter is 20 mm. Stem diameter is 3.5 mm. Weight: less than 28 g. Supplied: battery, Traceable® Certificate, and protective sleeve.

Description	Stem Length	Overall Length	Range	Accuracy	Cat. No.
Fisher Scientific Traceable® Long-Stem Thermometer	203 mm	279 mm	-58 to 302°F -50 to 150°C	±1°C	15-078J
Fisher Scientific Traceable® Long-Stem, Ultra™ Thermometer	203 mm	279 mm	–58 to 302°F –50 to 150°C	±0.2°C at tested points	14-648-12
Fisher Scientific Traceable® Extra-Long- Stem, Wide-Range Thermometer	289 mm	365 mm	–58 to 572°F –50 to 300°C	±1°C	15-077-59
Fisher Scientific Traceable® Extra-Long- Stem, Wide-Range, Ultra™ Thermometer	289 mm	365 mm	–58 to 572°F –50 to 300°C	±0.5°C at tested points	15-077-61

Traceable® Pocket Thermometer



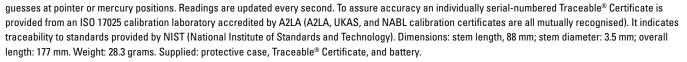
Unique, flat-profile design, weight of 28 g, and built-in pocket clip make it ideal to carry in a shirt pocket. Thermometer range is -58 to $572^{\circ}F$ and -50 to $300^{\circ}C$. Place probe in any solution and enjoy digital resolution of 0.1° from -20 to 200° (1° otherwise). Accuracy is $\pm 1.5^{\circ}C$. Ultra model accuracy is $\pm 0.4^{\circ}C$ at tested points. A HOLD key freezes display; another key switches from °F to °C.

Safe for all lab tests

Stainless-steel and plastic construction (no glass or mercury) makes it the safest lab thermometer ever designed. Measure temperature in soil, cuvettes, test tubes, food products, incubators, petroleum hydrocarbons, and virtually all lab tests. Probe guard snaps to the handle and extends overall length to 119 mm.

Records minimum/maximum reading

At the touch of a key, memory recalls minimum/maximum temperature readings over any time period. Large, bright LCD is 6.3 mm-high and 20 times more readable than eye-straining



Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Pocket Thermometer	±1.5°C	15-078G
Fisher Scientific Traceable® Ultra™ Pocket Thermometer	±0.4°C at tested points	06-664-33







Traceable® Lollipop™ Shock/Waterproof Thermometer



Lollipop™ Thermometer is waterproof

New heads-up Lollipop™ Traceable® Waterproof/Shockproof Thermometer replaces hazardous mercury units. Stainless-steel probe is resistant to most laboratory chemicals. Wide range covers 99 percent of the lab's routine temperature measurements: -58 to 572°F and -50 to 300°C. Resolution is 0.1° from -20 to 200°; 1° outside this range. Accuracy is ±1°C between 0 and 100°C. Ultra™ model accuracy is ±0.4°C at tested points.

Records minimum/maximum reading

Memory recalls highest and lowest temperature readings over any time period. Reading is updated every second. Solid-state construction eliminates dangers inherent in breakable glass and toxic mercury thermometers.

All-weather compatible

Operates without fail in any lab condition—outdoors too. Waterproof construction is ideal for wet labs, wash-down areas, and virtually all field applications. Shockproof in drop tests up to 1.5 metres. Bright 6.3 mm-high display is easy to view.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: stainless-steel probe, probe cover, battery. Stem dimensions: 3.5 mm diameter and 203 mm length. Overall unit length is 16.3 mm, width is 44.9 mm, and depth is 12.7 mm. Weight: 24.8 g.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Lollipop™ Shockproof/Waterproof Thermometer	±1°C	14-648-44
Fisher Scientific Traceable® Ultra™ Lollipop™ Shockproof/Waterproof Thermometer	±0.4°C at tested points	06-664-27

Traceable® Digital Dial Thermometer



Range from "brrr" to blistering

Range is -58 to $572^{\circ}F$ and -50 to $300^{\circ}C$. Wide temperature span combines the ranges of more than 90 different mercury thermometers. Place probe in a water bath and enjoy digital resolution to 0.1° and an accuracy of $\pm 1^{\circ}C$ between -20 to $100^{\circ}C$. Ultra^{\odot} model accuracy is $\pm 0.4^{\circ}C$ at tested points. Stainless-steel and plastic construction (no glass and no mercury) makes it the best and safest lab thermometer ever designed. Ideal for use in soil, cuvettes, test tubes, food products, incubators, biomedical reagents, and petroleum hydrocarbons.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Lightweight for portability

Large, bright 9.6 mm-high LCD (liquid crystal display) is 20 times more readable than eye-straining guesses at pointers or mercury positions. Readings are updated every 10 seconds. Supplied: protective case, battery, and Traceable® Certificate. Unit dimensions are 120 mm stem length, stem diameter of 4.8 mm, and 38.9 mm dial diameter. Weight: 31.8 g.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Digital Dial Thermometer °C	±1.0°C	15-078F
Fisher Scientific Traceable® Digital Dial Thermometer °F	±1.8°F	15-078D
Fisher Scientific Traceable® Ultra™ Digital Dial Thermometer °C	±0.4°C at tested points	06-664-31
Fisher Scientific Traceable® Ultra™ Digital Dial Thermometer ° F	±0.8°F at tested points	06-664-30

1 538:11



Traceable® Key-Chain Thermometer



Pocket-size Traceable® Key-Chain Thermometer is perfect for carrying with you. Clip to a lab coat buttonhole, jacket zipper, or belt loop, or use it with your keys. Hang in storerooms or fume hoods for easy monitoring. Fast, one-second response makes it ideal for measuring ambient air temperature. Stainless-steel probe (25.4 mm) is designed for penetration of semisolids and liquid measurements. Provides accurate readings when immersed only 8.3 mm. Range is -58 to 302°F and -50 to 150°C with a resolution of 0.1° and an accuracy of ±1° between -20.0 to 100.0°C. Lightweight (14.7 g) and miniature size (19 mm diameter x 95 mm) make it the convenient pocket thermometer.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited

by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: key-chain, battery, Traceable® Certificate.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Key-Chain Thermometer	±1°C between 20 to 100.0°C	15-077-58

Traceable® Jumbo-Display Dial Thermometer





Thermometer reads wide range -50 to 150°C

Dedicate this thermometer to a specific test. Provides continuous monitoring for over a year. To provide for even longer battery life, the unit has an on/off switch. Thermometer is switchable between °F/°C. Wide range of -58 to 302°F/-50 to 150°C covers 90 percent of lab temperature measurements. To achieve this temperature range with equivalent precision would require over 150 mercury thermometers. Enjoy digital resolution of 0.1° from -20 to 200° (1° outside this range). Accuracy is ±1°C between -20 and 100°C. Ultra™ model accuracy is ±0.3°C at tested points. Readings are updated every second. Smooth, stainless-steel probe is perfect for qunky and viscous solutions. Probe is resistant to most laboratory chemicals. Its piercing tip makes it perfect for measuring temperatures of semisolids. Plastic and stainless-steel construction makes it safer than mercury thermometers.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Extra-large, easy-to-read display is 9.6 mm-high. Bright LCD is easier to read than eye straining guesses at pointers or mercury positions. Stem length is 133 mm, stem diameter is 3.8 mm, and top diameter is 54 mm. Overall length is 165 millimetres. Weight: 28.3 grams. Supplied: battery and Traceable® Certificate.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Jumbo-Display Dial Thermometer	±1.0°C	15-078L
Fisher Scientific Traceable® Ultra™ Jumbo-Display Dial Thermometer	±0.3°C at tested points	14-648-47
Fisher Scientific Traceable® Surface Dial Thermometer Identical to Cat. No. 15-078L but with 12.7 mm-diameter metal disk at end of probe for surface measurements.	±1.0°C	15-077-60

Traceable® Food/Waterproof/Piercing Thermometer New piercing thermometer measures the internal temperature of stored, frozen, or prepared food. Stainless-steel probe is ideal for use in soil, brewing, food processing, refrigeration, and pharmaceutical applications. Waterproof construction allows it to be used in labs, plants, washdown areas, and the field. Manufactured to be drop-proof from 1.5 m. Eliminates the dangers inherent in breakable glass and toxic mercury thermometers. Wide range covers 99 percent of routine temperature measurements: -58 to 536°F and -50 to 280°C. Resolution is 0.1° from -20 to 200° (1° outside this range). Accuracy is ±1°C between -20 to 100°C. Ultra™ model accuracy is ±0.4°C at tested points. Reading is updated every second.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Large, bright LCD is 6.3 mm-high. Stem dimensions: 4.8 mm diameter and 203 mm length. Unit dimensions: 241 mm overall length, 88 mm-width, and 25.4 mm depth. Weight: 35.4 g. Supplied: battery and Traceable® Certificate.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Food/Waterproof/Piercing Thermometer	±1.0°C	14-648-43
Fisher Scientific Traceable® Ultra™ Food/Waterproof/Piercing Thermometer	±0.4°C at tested points	06-664-35



Traceable® Flip-Stick™ Thermometer



New flip-to-open design is easy to use. Stainless-steel probe may be positioned at any angle. Fold-up, protected probe permits carrying on the wrist strap or in a pocket. Big-digit, 19 mm-high display may be viewed at a glance. Shockproof in drop tests up to 1.5 m.

Reading is updated every second

Features include °F/°C switch, minimum and maximum memory readings over any time period, and a HOLD key freezes the display to capture temperature. Wide range covers 99 percent of routine temperature measurements: -58 to 572°F and -50 to 300°C. Resolution is 0.1° from -20 to 200° (1° outside this range). Accuracy is ±1°C between −20 and 100°C. Ultra[™] model accuracy is ±0.3°C at tested points.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Dimensions are a 3.5 mm stem diameter, 119 mm stem length, an extended length of 279 millimetres, 152 mm folded length, width of 15.8 mm and 38.9 mm. Weight: 67 g. Supplied: battery and Traceable® Certificate.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Flip-Stick™ Thermometer	±1°C	14-648-45
Fisher Scientific Traceable® Ultra™ Flip-Stick™ Thermometer	±0.3°C at tested points	06-664-26



Traceable® Waterproof Food 🦃 **HACCP Thermometer**





Traceable® Waterproof Food HACCP Thermometer's easy-to-use membrane keys and rugged ABS body make it ideal for food labs, food processing, food preparation, and brewing. Waterproof construction allows for use in labs, plants, and all food areas.

For versatility, unit combines non-contact, non-invasive, no-touch, infrared thermometer and piercing stainless-steel probe thermometer. Designed specifically as a HACCP (Hazard Analysis and Critical Control Point) thermometer, it's a state of the art approach to food safety. LEDs indicate the HACCP zones: green light under 4°C (40°F), green light over 60°C (140°F), and red danger light between 4 to 60°C (40 to140°F).

Temperature range for infrared is -67 to 482°F (-55 to 250°C), and probe range is -67 to 626°F (-55 to 330°C). Resolution is 0.2°C (0.5°F) between -10 and 200; otherwise 1°. Accuracy between -5 to 65°C for infrared is ±0.6°C and for probe is ±0.5°C. Readings are updated every second. The display shows current temperature, minimum or maximum temperature, low battery, and emissivity value. Infrared emissivity default is 0.95. It is adjustable from 0.1 to 1.0. Field of view ratio is 2.5:1 (at a distance of 127 mm the reading spot size is 50.8 mm).

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Bright LCD digits are 6.3 mm-high. Stainless-steel probe (152 mm) folds out of 165 x 25.4 x 38 millimetres. Unit extends to an overall length of 317 mm. Weight: 99 g. Supplied: battery and Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Waterproof Food HACCP Thermometer	14-649-102



Cat. No.	Page No.	Traceable® Certificate Supplied	Range	Resolution	Accuracy (°C)	Probe Length (mm)	Waterproof: Total Unit/ Cable/Probe	Alarm	Min/max
15-081-102	4	Yes	-200 to 500°C / -328 to 932°F	0.001° or 0.0001°	±0.05	160	n/y/n	no	yes
15-081-103	4	Yes	–200 to 500°C / –328 to 932°F	0.001° or 0.0001°	±0.05	25.4	n/n/y	no	yes
15-081-101	4	Yes	–10 to 110°C / 14 to 230°F	0.1°	±1	508	y/y/y	no	yes
15-081-109	5	Yes	-100 to 199°C / -148 to 199°F	0.01°	±0.1	228	n/n/y	yes	yes
15-081-108	5	Yes	-100 to 199°C / -148 to 199°F	0.01°	±0.1	19	n/n/y	yes	yes
15-078J	11	Yes	–50 to 150°C / –58 to 302°F	0.1°	±1	203	n/na/y	no	no
14-648-12	11	Yes	-50 to 150°C / -58 to 302°F	0.1°	±0.2*	203	n/na/y	no	no
15-077-59	11	Yes	–50 to 300°C / –58 to 572°F	0.1°	±1 / ±0.5*	289	n/na/y	no	no
15-078G	11	Yes	–50 to 300°C / –58 to 572°F	0.1°	±1.5 / ±0.4*	88	n/na/y	no	yes
15-077-54	10	Yes	–50 to 280°C / –58 to 536°F	0.1°	±1.0 / ±0.4*	203	n/na/y	no	no
14-649-100	10	Yes	-50 to 300°C / -58 to 572°F	0.1°	±1.5 / ±0.4*	88	n/na/y	no	yes
14-648-44	12	Yes	–50 to 300°C / –58 to 572°F	0.1°	±1.0 / ±0.4*	203	y/na/y	no	no
15-078F	12	Yes	–50 to 300°C / –58 to 572°F	0.1°	±1.0 / ±0.4*	120	n/na/y	no	no
15-077-58	13	Yes	–50 to 150°C / –58 to 302°F	0.1°	±1.0	19	n/na/y	no	no
15-078L	13	Yes	-50 to 150°C / -58 to 302°F	0.1°	±1.0 / ±0.3*	133	n/na/y	no	no
15-077-60	13	Yes	–50 to 150°C / –58 to 302°F	0.1°	±1.0	133	n/na/y	no	no
14-648-43	13	Yes	–50 to 280°C / –58 to 536°F	0.1°	±1.0 / ±0.4*	203	y/na/y	no	no
14-649-102	14	Yes	–55 to 330°C / –67 to 626°F	0.2°	±0.5	152	n/na/y	no	yes
14-648-45	14	Yes	–50 to 300°C / –58 to 572°F	0.1°	±1.0 / ±0.3*	119	n/na/y	no	yes

^{*}Ultra™ thermometers are tested at selected test points to be within tighter than normal tolerances to assist in providing improved accuracy. Other points will not necessarily fall within the same accuracy as those found at the selected test points.

Cable Probe Thermometer Specifications Chart

Cat. No.	Page No.	Traceable® Certificate Supplied	Range	Resolution	Accuracy (°C)	Length Probe	Cable	Waterproof Total Unit/Cable/Probe	Alarm	Min/max
15-077-8	3	Yes	–50 to 150°C / –58 to 302°F	0.001°	±0.05	228 mm	Lable 1.5 m	n/n/y	no	yes
15-077-32	6	Yes	-50 to 150°C / -58 to 302°F	0.001 0.1°	±1.0	177 mm	0.4 m	n/n/y	no	no
14-648-46	7	Yes	-50 to 300°C / -58 to 572°F	0.1°	±1.0	190 mm	3 m	y/y/y	yes	yes
14-649-79	7	Yes	-50 to 300°C / -58 to 572°F	0.1°	±1.0	190 mm	1 m	n/n/y	yes	yes
15-077-8A	7	Yes	-50 to 260°C / -58 to 500°F	0.1°	±1.0	184 mm	1 m	n/n/y	yes	yes
15-077-0A	9	Yes	-50 to 250°C / -58 to 500°F	0.1°	±1.0 / ±0.5*	146 mm	3 m	n/n/y	no	no
06-664-36	9	Yes	-50 to 300°C / -58 to 572°F	0.1°	±1.0 / ±0.5*	146 mm	3 m	n/n/y	yes	yes
15-077-29	9	Yes	0 to 200°C / 32 to 392°F	1°	±2.0	215 mm	1 m	n/n/y	yes	no
15-077-25 15-077-9E	8	Yes	-50 to 300°C / -58 to 572°F	0.1°	±1.0 / ±0.4*	120 mm	3 m	y/y/y	no	yes
15-077-943	8	Yes	-50 to 300°C / -58 to 572°F	0.1°	±1.0 / ±0.4	69 mm	3 m	n/n/y	no	yes
15-077-8D	18	Yes	-50 to 70°C / -58 to 158°F	1°	±1.0	19 mm	3 m	n/y/y	yes	yes
06-664-255	16	Yes	-30 to 85°C / -22 to 185°F	0.1°	±1.0	63 mm	na	y/na/y	no	yes
15-078-176	16	Yes	-50 to 70°C / -58 to 158°F	0.1 0.01°	±0.3	63 mm	3 m (2)	n/y/y	yes	yes
15-070-170	17	Yes	-30 to 70°C / -22 to 158°F	0.01°	±0.5/±0.6*	63 mm	2 m	n/n/y	yes	yes
15-081-111	17	Yes	-30 to 70°C / -22 to 158°F	0.1°	±0.5/±0.6*	25.4 mm	2 m	n/n/y	yes	yes
15-081-111	17	Yes	-50 to 70°C / -58 to 158°F	0.1°	±0.3/±0.0	63 mm	3 m	n/y/y	yes	yes
15-081-113	19	Yes	-30 to 70°C / -22 to 158°F	0.01°	±0.1	63 mm	n/a	n/na/y	yes	yes
06-664-11	18	Yes	-50 to 70°C / -58 to 158°F	1°	±1	63 mm	3 m	n/y/y	yes	yes
14-648-233	18	Yes	-50 to 70°C / -58 to 158°F	0.1°	±1	63 mm	3 m	n/y/y	yes	yes
14-648-232	18	Yes	-50 to 70°C / -58 to 158°F	0.1°	±1	19 mm	3 m	n/y/y	yes	yes
14-648-26	20	Yes	-40 to 80°C / -40 to 176°F	0.1°	±1.5	38 mm	1.8 m	n/y/y	no	yes
15-077-17B	20	Yes	-50 to 70°C / -58 to 158°F	1°	±1.0	19 mm	3 m	n/y/y	no	yes
15-078-184	19	Yes	-50 to 70°C / -58 to 158°F	0.1°	±1	63 mm	1 m (2)	n/y/y	yes	yes
06-664-23	21	Yes	-50 to 70°C / -58 to 158°F	0.1°	±0.5	63 mm	3 m	n/y/y	yes	yes
15-077-50	21	Yes	-50 to 70°C / -58 to 158°F	0.1°	±0.5	19 mm	3 m	n/y/y	yes	yes
15-077-22	22	Yes	-50 to 70°C / -58 to 158°F	0.1°	±1.0	19 mm	3 m	n/y/y	no	yes
15-077-22	22	Yes	0 to 50.0°C / 32.0 to 122°F	0.1°	±1.0	19 mm	3 m	n/y/y	no	no
15-077-8C	22	Yes	-50 to 70°C / -58 to 158°F	0.1°	±1.0	19 mm	3 m	n/y/y	no	no
15-077-27	23	Yes	-50 to 70°C / -58 to 158°F	0.1°	±1.0	15 mm	1 m	n/y/y	yes	no
15-077-27	23	Yes	-50 to 70°C / -58 to 158°F	0.1°	±1.0	15 mm	1 m	n/y/y		no
13-0//-30	23	Yes	-50 to 70°C / -58 to 158°F	0.1	±1.U	15 mm	ı m	11/ y/ y	yes	ПО

Traceable® Digital-Bottle™ Refrigerator/Freezer Thermometer





Entire unit is waterproof

Accurately monitor temperatures in freezers, refrigerators, and environmental chambers with this temperature-buffered sensor. Bottle and solution insulate sensor from rapid changes, as an example, when a refrigerator door is opened. Stainless-steel sensor/probe assures long product life.

Records high/low readings

Easy-to-read digital display shows high, low, and current temperatures. Min/Max monitors high/low readings overnight, on weekends, or for any time period—a significant advantage over glass thermometers displaying only the current temperature. The entire unit including bottle and display may be placed in any environment within the operating temperature range of −22 to 185°F (−30 to 85.0°C). Resolution: 0.1°. Accuracy: ±1.0°C between −20.0 to 85°C. Ultra™ model accuracy: ±0.4°C at tested points.

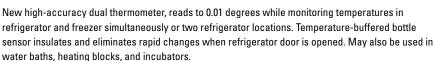
Supplied with unique holder

Chemical-resistant ABS plastic holder stands on a shelf or holder affixes to any wall. Bottle may be removed from holder. Probe is sealed in a miniature bottle filled with nontoxic glycol. Solution is GRAS (generally recognised as safe) by the U.S. FDA. It eliminates concerns about incidental contact with food or drinking water. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: holder, Velcro®, replaceable battery. Unit size: 47 x 25.4 x 117 mm, holder is 57 x 57 x 28.5 mm. Weight: 103 g.



Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Digital-Bottle™ Refrigerator/Freezer Thermometer (patents pending)	±1.0°C	06-664-255
Fisher Scientific Traceable® Digital-Bottle™ Ultra™ Refrigerator/Freezer Thermometer (patents pending)	±0.4°C at tested points	06-664-256
Fisher Scientific Traceable® Digital-Bottle™ Refrigerator/Freezer Thermometer (Supplied with bottle probe filled with glass beads instead of solution) (patents pending)	±1.0°C	06-664-257
Fisher Scientific Traceable® Digital-Bottle™ Ultra™ Refrigerator/Freezer Thermometer (Supplied with bottle probe filled with glass beads instead of solution) (patents pending)	±0.4°C at tested points	06-664-258

Traceable® High-Accuracy Refrigerator Thermometer



Records time and date for Min/Max readings and Hi/Lo alarm alerts

Triple display simultaneously shows minimum/maximum and current temperatures. Monitors readings overnight, on weekends, or for any time period and displays the exact time and date when the Min/ Max temperature occurred for both bottle probes. Two channel alarms provide unique visual (LEDs) and audio alerts when temperature rises above or falls below high and low set points. Unit displays the exact time and date when dual thermometer alarms are triggered. Alarms are programmable in 0.1° increments. Three-metre micro-cable permits refrigerator doors to close on it.

Wide-range and high resolution

Range: -58 to $158^\circ F$ and -50 to $70^\circ C$ with a resolution of 0.01° and accuracy of $\pm 0.3^\circ C$. Probe is sealed in a miniature bottle ($25.4 \times 63.5 \text{ mm}$) filled with nontoxic glycol. Solution is GRAS (generally recognised as safe) by the U.S. FDA. Eliminates concerns about incidental contact with food or drinking water. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: $69.8 \times 107 \times 19$ millimetres. Weight: 141 grams. Supplied: stand, Velcro®, magnetic strips, wall mount, Traceable® Certificate, batteries.







Description	Probe	Cat. No.
Fisher Scientific Traceable® High-Accuracy Refrigerator Thermometer (patented)	1 bottle	15-078-215
Fisher Scientific Traceable® High-Accuracy Refrigerator Thermometer (patented)	2 bottle	15-078-176
Fisher Scientific Traceable® Hghi-Accuracy Probe Thermometer (see bottom picture)	2 (chemical-resistant, waterproof sensor measures 0.47 mm diameter and 19 mm long)	15-078-177







Traceable® Memory-Card Refrigerator/Freezer Thermometer

It records readings from once a minute up to once every 720 minutes on a removable standard SD memory card. Thermometer captures 5.9 million readings with the supplied 256 mb removable SD memory card. Memory card reader (supplied) plugs into any USB computer port for an instant report. Text report includes date/time of day and sensor readings, it may be sent to any spreadsheet or database. The bottle probe model: for monitoring refrigerators, freezers, and incubators; the stainless-steel probe model: QC and research. Bottle probe model meets all federal and state refrigerator thermometer requirements.

Sealed bottle sensor is insulated from rapid temperature changes when refrigerator door is opened. Solution in sealed bottle is GRAS—generally recognised as safe by FDA. Thin cable is easy for refrigerator door to close and seal. Minimum/maximum feature displays highest/lowest readings for any time period. Alarm sounds and flashes a bright red LED when temperature rises above or falls below user-set trip points, alarm sets in 0.1° increments. Unique 4-line display shows temperature of probe, ambient temperature, humidity and time of day.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Probe temperature range: –22 to 158°F (–30 to 70°C) with 0.1° resolution. Probe temperature accuracy: ±0.6°C (0 to 50°C), ±1.2 (–30 to 0°C, 50 to 70°C). Probe size: bottle 25.4 x 63 mm, stainless-steel 4 x 25 mm. Cable length: 2 metres. Humidity range: 0 to 99.9%RH, resolution 0.1. Humidity accuracy: ±5%RH at 25°C for range of 20 to 85%RH, ±7%RH elsewhere. Size: 107 x 88 x 31 mm. Weight: 198 g. Case: high-impact, chemical-resistant ABS plastic. Supplied: probe, cable, 256 mb SD memory card, USB memory card reader, magnetic mounting strips, Velcro®, wall mount, bench stand, batteries, adaptor, Traceable® Certificate.



Thin cable makes it easy for refrigerator door to close and seal

Description	Probe	Cat. No.
Fisher Scientific Traceable® Memory-Card Refrigerator/Freezer Thermometer	Bottle	15-081-110
Fisher Scientific Traceable® Memory-Card with Stainless-steel Probe (without bottle) Thermometer	Stainless-steel	15-081-111

Traceable® Platinum High-Accuracy Refrigerator Thermometer





Displays minimum/maximum temperatures for previous 24 hours (for each hour) and previous 7-days (for each day); or previous 30 days (for each day). Time/Date stamp key shows exact time and date for all minimum and maximum readings. A 4-wire platinum sensor insures linear response and high accuracy across entire range. Range: –58.00 to 158.00°F (–50.00 to 70.00°C). Resolution: 0.01°. Accuracy: ±0.1°C; fulfills precise requirements for refrigerators/freezers. Sealed bottle probe version is insulated from rapid temperature changes when door is opened. Sealed bottle liquid is GRAS— liquid generally recognised as safe by US Food and Drug Administration. Refrigerator/ freezer door closes and seals tightly around micro-thin cable. Triple display shows current and minimum/maximum temperatures. Alarm is settable in 0.1° increments and signals when temperature rises above/falls below set points. Visual LEDs and audible alarm signals continuously, even if temperature returns to non-alarm range.

Traceable®: To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 69.8 x 107 x 19 millimetres. Weight: 141 grams. Case: high-impact, chemical-resistant ABS plastic. Supplied: platinum bottle probe, cable, magnetic strips, Velcro® tape, bench stand, batteries, Traceable® Certificate.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Platinum High-Accuracy Refrigerator Thermometer (patents pending)	Bottle	15-081-106
Fisher Scientific Traceable® Platinum High-Accuracy Thermometer (patents pending)	0.47 mm diameter x 19 mm long	15-081-107



Traceable® Refrigerator/Freezer Thermometer



Accurately monitor temperatures in freezers, water baths, heating blocks, incubators, and refrigerators with this enclosed temperature-buffered sensor. Bottle insulates sensor from rapid temperature changes when refrigerator door is opened. Triple display simultaneously shows high, low, and current temperatures. Min/max monitors high/low readings overnight, on weekends, or for any time period. Range: -58 to 158°F and -50 to 70°C with a resolution of 1° and accuracy of ± 1 °C.

Signals out-of-range conditions

Alarm feature provides alert when temperature rises above or falls below a set point. Alarm is programmable in 1° increments. Visual and audible signals continue even if temperature returns to non-alarm range. Three-metre microcable permits refrigerator doors to close on it. Probe is sealed in a miniature bottle (25.4 x 63.5 mm) filled with nontoxic glycol. Solution is GRAS (generally recognised as safe) by the U.S. FDA. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 69.8 x 107 x 19 millimetres. Weight: 113 g. Supplied: Traceable® Certificate, flip-open stand, wall mounting, Velcro®, magnetic strips.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Refrigerator/Freezer Thermometer (patented)	Bottle designed for refrigerator/freezer applications	06-664-11
Fisher Scientific Traceable® 5ml Vaccine Thermometer (patented) (smaller bottle pictured	Bottle mimics vaccine temperature and fits in tray	15-077-720
Fisher Scientific Traceable® Memory Monitoring Thermometer	0.47 mm diameter and 19 mm long	15-077-8D

Traceable® Jumbo Display Refrigerator/Freezer Thermometer



Perfect jumbo digit thermometer for monitoring freezers, water baths, heating blocks, incubators, and refrigerators. Accurately monitors temperatures with its enclosed temperature-buffered sensor. Bottle insulates sensor from rapid temperature changes when refrigerator door is opened. Triple-display simultaneously shows maximum, minimum, and current probe temperatures plus room temperature. Min/max monitors high/low readings overnight, on weekends, or for any time period. Range: -58 to 158° F and -50 to 70° C with a resolution of 0.1° and accuracy of $\pm 1^{\circ}$ C.

Signals out-of-range conditions

Alarm feature provides alert when temperature rises above or falls below a set point. Alarm is programmable in 1° increments. Three-metre micro-cable permits refrigerator doors to close on it. Solid-state probe eliminates mercury contamination. Probe is sealed in a miniature bottle (25.4 x 63.5 mm) filled with patented nontoxic glycol. Solution is GRAS (generally recognised as safe) by the U.S. FDA. Eliminates contact with food or drinking water. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Supplied: Traceable® Certificate, flip-open stand, wall mount, Velcro®, magnet, battery. Easy-view, jumbo 38 mm-high digits may be read from 9 metres. Sensor and 3 metre cable perform accurately even when under water. Size: 98 x 111 x 22 mm. Weight: 113 g.



Description	Probe	Cat. No.
$Fisher\ Scientific\ Traceable @\ Jumbo\ Refrigerator/Freezer\ Thermometer\ (patented)$	Bottle designed for refrigerator/freezer applications	14-648-233
Fisher Scientific Traceable® 5ml Vaccine Jumbo Thermometer (smaller bottle)	Bottle mimics vaccine temperature and fits in tray	06-664-270
Fisher Scientific Traceable® Jumbo Memory Monitoring Thermometer (insert)	0.47 mm diameter and 19 mm long	14-648-232



Traceable® Wireless Radio-Signal Refrigerator Thermometer





Unit wirelessly reads refrigerator temperatures from up to 30 metres away. Temperature readings from up to three remote refrigerator sensors are sent to a main unit via radio signal (frequency of 433 MHz, penetrates refrigerators and walls). Sealed GRAS bottle is insulated from rapid temperature changes when refrigerator door is opened. Liquid in sealed bottle is GRAS—generally recognised as safe by FDA. Data is updated every 30 seconds. Minimum/Maximum memory allows monitoring conditions over any time period. Distinctive alarm sounds when temperature rises above/falls below settable high and low set points. Alarms may be conveniently set in 1° increments. Indicator on main unit shows rising/falling temperature trends.







15-081-113

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Range: -22.0 to $158.0^{\circ}F$ (-30.0 to $70.0^{\circ}C$). Resolution: 0.1° . Accuracy: $\pm 1.0^{\circ}C$. Main unit has an easy-read, 2-line LCD with jumbo 28.5 mm high digits. Size: $107 \times 114 \times 19$ mm (main unit), $59 \times 88 \times 19$ mm (remote unit). Weight: 170 g (main unit), 85 g (remote unit). Case: high-impact, chemical-resistant ABS plastic. Supplied: one main unit, one remote unit, flip-open stand, wall mount, Velcro®, batteries, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Wireless Radio-Signal Refrigerator Thermometer with Remote Refrigerator Bottle Probe Module	15-081-113
Fisher Scientific Additional Traceable® Remote Refrigerator Bottle Probe Module (total of 3 may be used) (patented)	15-081-114

Traceable® Dual Thermometer displays Min/Max with Time/Date

Traceable® Dual thermometer displays the temperatures of two separate probes in °C and °F. Allows putting one probe in the freezer and another in the refrigerator (or measure two areas of a refrigerator). Range is -58 to 158°F and -50 to 70°C with a resolution of 0.1° and an accuracy of ± 1 °C. Displays date and time when minimum and maximum temperatures occur. Audible and visual alarm feature provides alert when temperature rises above or falls below two set points. Alarm is programmable in 1° increments. One-metre-cable permits refrigerator doors to close on it. Probe is sealed in a miniature bottle (25.4 x 63.5 mm) filled with nontoxic glycol. Solution is GRAS (generally recognised as safe) by the U.S. FDA.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: $88 \times 44 \times 25.4$ millimetres. Weight: 103 g. Supplied: Traceable® Certificate, battery, flip-open stand, Velcro®, and magnetic strips.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Dual Thermometer (patented)	Supplied with 2 bottle for refrigerator/freezer applications	15-078-184
Fisher Scientific Traceable® Dual Thermometer (lower picture)	Supplied with two 0.47 mm diameter and 19 mm long, waterproof	15-078-185



Traceable® Sentry™ Thermometer



Simultaneously displays high/low and current temperature

A triple display constantly shows high, low, and current temperatures. Instantly view if freezer, water bath, or incubator is within temperature spec. Monitor temperature of any experiment when you're not there—overnight, weekends, even during lunch. Range is -58 to 158° F or -50 to 70° C. Resolution is 1° and accuracy is $\pm 1^{\circ}$ C.

Sensor and 3 metre cable may be placed under water, in refrigerator, or freezer. Small cable diameter (1.5 mm) allows refrigerator doors to close on it. Unplugging the cable activates a sensor inside the unit for monitoring ambient temperature.



Simple, one-key operation resets the minimum/maximum memories. Probe's wire-mounting bracket permits easy sensor placement. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Unit's high-impact ABS plastic case has a flip-open stand, wall mount, magnet, Velcro®. Size: 66.6 x 63 x 19 mm. Weight: 53 g.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Probe Sentry™ Thermometer °F	0.47 mm diameter and 19 mm long	15-077-17A
Fisher Scientific Traceable® Probe Sentry™ Thermometer °C	0.47 mm diameter and 19 mm long	15-077-17B
Fisher Scientific Traceable® Sentry™ Thermometer °F with Bottle	Bottle specifically for refrigerator/freezer applications (patented)	15-077-942
Fisher Scientific Traceable® Sentry™ Thermometer °C with Bottle	Bottle specifically for refrigerator/freezer applications (patented)	15-077-941
Fisher Scientific Traceable® Sentry™ 5ml Vaccine Thermometer °F with Bottle	5ml vaccine bottle mimics vaccine temperature and fits in tray.	15-077-724
Fisher Scientific Traceable® Sentry™ 5ml Vaccine Thermometer °C with Bottle	5ml vaccine bottle mimics vaccine temperature and fits in tray.	15-077-725

Traceable® Thermometer with Time/Date and Max/Min Memory



Thermometer displays current, minimum, and maximum temperatures. It captures and shows the exact time and date when the minimum and maximum temperature occurred. Ideal for monitoring solutions and refrigerators. Range is -40.0 to 176.0° F and -40.0 to 80.0° C with a resolution of 0.5° and accuracy of $\pm 1.5^{\circ}$ C. Display's 9.6 mm-high digits show Min/Max of ambient or probe temperature, time of day, and month/day.

Submersible probe

Wire mounting bracket permits easy probe placement. Sensor and 20 m cable perform accurately even when both are under water. Sensor: 4.7 mm dia. x 38 mm length.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: flip-open stand, wall mounting slot, Velcro®, Traceable® Certificate, battery. High-impact ABS plastic case: 90 x 90 x 24 millimetres. Weight: 99 g.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Probe Thermometer with Time/Date & Max/Min	0.47 mm diameter and 19 mm long	14-648-26
Fisher Scientific Traceable® Thermometer with Time/Date Max/Min Memory with bottle	Bottle specifically for refrigerator/freezer applications (patented)	15-077-976
Fisher Scientific Traceable® 5ml Vaccine Thermometer with Time/Date & Max/Min Memory	5ml vaccine bottle mimics vaccine temperature and fits in tray.	15-077-723



Traceable® Refrigerator/Freezer Plus™ Thermometer

Accurately monitor temperatures in freezers, water baths, heating blocks, incubators, and refrigerators with this enclosed temperature-buffered sensor. Bottle insulates sensor from rapid temperature changes when refrigerator door is opened. Triple display simultaneously shows minimum, maximum, and current temperatures. Min/Max monitors high/low readings overnight, on weekends, or for any time period—a significant advantage over current reading-only glass thermometers. Range is -58 to 158° F and -50 to 70° C with a resolution of 0.1° and accuracy of $\pm 0.5^{\circ}$ C. Alarm feature provides alert when temperature rises above or falls below a set point. Alarm is programmable in 1° increments. Three-metre micro-cable permits refrigerator doors to close on it.

Avoids contaminants

Solid-state probe eliminates mercury contamination in refrigerators. Probe is sealed in a miniature bottle (25.4 x 63 mm) filled with nontoxic glycol. Solution is GRAS (generally recognised as safe) by the US FDA. Eliminates concerns about contact with food or drinking water. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST. High-impact, chemical-resistant ABS plastic case: 82 x 63 x 15.8 millimetres. Weight: 113 g. Supplied: Velcro®, magnetic strips, Traceable® Certificate, battery.



Description	Probe	Cat. No.
Fisher Scientific Traceable® Refrigerator/Freezer Thermometer	Bottle specifically for refrigerator/freezer applications (patented)	06-664-23
Fisher Scientific Traceable® 5ml Vaccine Plus™ Thermometer	5ml vaccine bottle mimics vaccine temperature and fits in tray	15-077-721
Fisher Scientific Traceable® Memory Monitoring Plus™ Thermometer	0.47 mm diameter and 19 mm long	06-664-269

Traceable® Radio-Signal Remote Thermometer



Reads temperatures 30 metres away

Module transmits on a radio frequency of 433 MHz, penetrating walls, with a range of 30 metres. Data is transmitted every 30 seconds. Main unit can receive and display data from 3 different remote modules. Modules may be set to channel 1, 2, or 3. Display's trend indicator shows whether temperature is rising or falling. Minimum and maximum memory display allows monitoring of conditions over short or long periods, including hours or months. Alarms may be set in 1° increments. Alarms sound when the temperature rises above or falls below the two set points. Jumbo digits (28.5 mm high) may be read from 7.6 m.

Reads up to three modules

Total of three modules may be used with the main receiver. The splashproof remote module is supplied with an internal and external sensor. External sensor (4.7 mm dia. x 19 mm long) and 3 metre cable perform accurately even when both are under water. Switchable $^{\circ}F/^{\circ}C$ range: -58.0 to $158.0^{\circ}F$ (-50 to $70.0^{\circ}C$) probe, and -14.2 to $158.0^{\circ}F$



(–9.9 to 70.0°C) ambient. Resolution: 0.1°. Accuracy: ±1°C. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: one main unit 107 x 114 x 15.8 mm, Weight: 170 g, one remote module 59 x 88 x 19 mm, Weight: 85 g; internal probe and external probe/cable. Supplied: Traceable® Certificate, flip-open stand, wall bracket, Velcro®, batteries.

Description	Probe	Cat. No.
Fisher Scientific Traceable® Radio-Signal Remote Thermometer with Remote Module with probe	Ambient	15-077-50
Fisher Scientific Additional Traceable® Remote Module (total of 3 modules may be used)	0.47 mm diameter and 19 mm long	15-077-51
Fisher Scientific Traceable® Stainless-Steel Probe	3 mm dia. x 215 mm, 1.5 m cable	15-077-52
Fisher Scientific Traceable® External Bottle Probe (patented)	Bottle for refrigerator/freezer applications	15-077-53
Fisher Scientific Traceable® 5ml Vaccine Bottle Probe	5ml bottle mimics vaccine temperature – fits in tray	15-077-722



Traceable® Big-Digit Memory Thermometer



Big-digit thermometer with dual min/max memory

Easy-view, 28.5 mm-high jumbo digits may be read from 7.6 m. Dual display permits reading ambient and probe temperatures simultaneously. Minimum/maximum memory readings may be displayed or reset at the touch of a key. External probe range is -58.0 to 158.0° F/-50.0 to 70.0° C. Ambient sensor (inside case) range is 23.0 to 122.0° F/-5.0 to 50.0° C. Resolution is 0.1° and accuracy is $\pm 1^{\circ}$ C. This stable and accurate unit requires no adjustment or maintenance. External (4.7 mm diameter by 20 mm length) probe is supplied with a 3 metre cable. Both cable and sensor perform accurately when under water. Always-on instrument reads temperatures constantly.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: flip-open stand, wall mounting, Velcro®, Traceable® Certificate, and battery. Case is high-impact, chemical-resistant ABS plastic. Size: 101 x 107 x 19 mm. Weight: 113 g.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Big-Digit Memory Thermometer	±1°C	15-077-22



Traceable® Monitoring Thermometer



Monitoring Thermometer has probe and 3 metres of submersible cable

Monitor temperatures of liquids, air/gas, and semisolids from across the room on a giant LCD. Perfect thermometer for monitoring reagents or solutions in tanks, water baths, incubators, and refrigerators. Reads from -58.0 to 158.0° F and -50.0 to 70.0° C with 0.1° resolution and $\pm 1^{\circ}$ C accuracy. Reads in $^{\circ}$ F or $^{\circ}$ C with the flick of a switch. Unit displays ambient temperature and probe temperature at the touch of a key. Microcomputer and solid-state construction rid lab of glass thermometer breakage and mercury problems. Display updates every 10 seconds, thus eliminating 3-minute lag inherent in glass and dial thermometers. Easy-view, 19 mmhigh display may be read from 3 metres. Velcro® tabs on back allow unit to be placed on ovens, water baths, desiccators, or refrigerators. Three-metre cable and sensor perform accurately even under water.



To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Sensor diameter is 4.7 mm and length is 20 mm. Size: 82 x 57 x 15.8 mm. Weight: 70 g. Supplied: Traceable® Certificate, probe bracket, Velcro® tabs, flip-open stand, battery.

Description	Cat. No.
Fisher Scientific Traceable® Monitoring Thermometer	15-077-8C

Traceable® Solar-Powered Thermometer



Thermometer is always-on and runs for years powered from light in lab or plant. Efficient and cost-saving solar panels make unit environmentally attractive. Monitor ambient temperature or temperatures of liquids, air/gas, and semisolids. Perfect thermometer for measuring temperatures of solutions in tanks, water baths, incubators, and refrigerators. Sensor and cable perform accurately even when under water. It's ideal for food inspection, petroleum tests, quality control, biomedical studies, R/D analysis, and wastewater tests. Display updates every 10 seconds to save time and eliminate 3-minute lag inherent in glass and dial thermometers. Resolution: 0.1°. Accuracy: ±1°C.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: slot for wall mounting, Velcro®, solar panels, backup battery, external 4.7 mm dia. by 20 mm sensor, and 3 metre cable. Unit: 69.8 x 69.8 x 19 millimetres. Weight: 56 g.

Description	Range	Cat. No.
Fisher Scientific Traceable® Solar-Powered Thermometer, External	-58.0 to 158°F / -50.0 to 70.0°C	15-077-20
Fisher Scientific Traceable® Solar-Powered Thermometer, Internal	32.0 to 122°F / 0 to 50.0°C	15-077-19









Traceable® Four-Alarmer Thermometer



Thermometer has four unique alarm configurations: alarm triggers when temperature is higher than set point, lower than set point, outside of high and low set points, or inside of high and low set points. This allows precise monitoring of any appliance (water bath, incubator, refrigerator) or experiment.

Green/red lights blink and alarm sounds when out-of-range condition is detected. Continuous alarm sounds every minute for 5 seconds until the temperature returns to non-alarm condition or until alarm is turned off. Range: -50.0 to 70.0° C. Resolution: 0.1°. Accuracy: $\pm 1^{\circ}$ C. Twelve millimetre-high digits are readable from 3 metres. Front panel controls make it easy to set.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 76 x 76 x 12.7 millimetres. Probe size: 5 mm dia. x 15 mm length, 1 metre cable. Weight: 63 g. Supplied: removable suction cup, stand, self-adhesive wall mount, Traceable® Certificate, battery.

Description	
Fisher Scientific Traceable® Big-Digit Four-Alert Alarm Thermometer	15-077-27

Traceable® Big-Digit 4-Alert Alarm Thermometer



Large, 28.5 mm-high digits can be viewed from across the lab. Unique Four-Alert Thermometer provides user with precise monitoring of the slightest change in temperature. Range: -50.0 to 70.0° C. Resolution: 0.1°. Accuracy: $\pm 1^{\circ}$ C. Front panel controls are easy to set. Unit displays both probe and ambient temperature.

Warns if too hot or cold

Alarm will activate at a temperature above a setting, below a setting, between two settings, or outside two settings. Green/red lights blink and an alarm sounds when an out-of-range condition is detected. Continuous alarm sounds every minute for 5 seconds until the temperature returns to a non-alarm condition or until the alarm is turned off. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: wall mount, stand, and suction cup. Sensor dimensions: 5 mm dia. x 16.7 mm length, 1.2 m cable. Size: 101 x 101 x 15.8 mm. Weight: 120 g.





Traceable® -100.0 Platinum Freezer Thermometer



RTD Platinum Freezer Thermometer accurately monitors temperatures in freezers, water baths, heating blocks, incubators, and refrigerators. Range: –99.9 to 199.9°C. Resolution: 0.1°. Accuracy: ±2°C. Three-metre, ultra-thin micro-cable permits freezer doors to close on it without affecting the seal. Fast-response –100.0-ohm platinum triple purpose probe for use with liquids, air/gas, and frozen material.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Shown on the certificate are calibration test points of –80°C, 0°C, and 100°C. Supplied: adjustable probe holder, Velcro®, magnetic strips, probe, Traceable® Certificate, carrying case, battery. RTD Platinum probe length 76 mm, diameter 4 mm; overall length 127 mm, 3 metre cable. High-impact, chemical-resistant ABS case: 69.8 x 107 x 19 millimetres. Weight: 120 g.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® –100.0 Platinum Freezer Thermometer	±2°C	15-077-961







Traceable® Big-Digit Refrigerator Thermometer



Wide-Range Big-Digit Refrigerator Thermometer's 22 mm high display is easy to view. Switchable range is from -3.8 to 199.9° F and -19.9 to 110.0° C with a resolution of 0.1° . Accuracy is $\pm 1^{\circ}$ C in the range 0 to 25° C and $\pm 1.5^{\circ}$ C outside range. Ultra^m model accuracy is $\pm 0.5^{\circ}$ C at tested points. May be placed anywhere using four methods: secure suction cup, Velcro[®], stand, and hanger. Display updates every 30 seconds (this allows capturing a reading while allowing a momentary open refrigerator door). Wide range of the thermometer also makes it an ideal unit to monitor temperatures in storerooms, labs, offices, hoods, and outdoors.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 88 x 50 x 19 millimetres. Weight: 31 g.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Big-Digit Refrigerator Thermometer	±1°C	15-078-182
Fisher Scientific Traceable® Big-Digit Ultra™ Refrigerator Thermometer	±0.5°C at tested points	15-078-183

Traceable® Big-Digit See-Thru™ Thermometer



Use the Traceable® Big-Digit See-Thru™ Thermometer outdoors, in storerooms, at fume hoods, labs, clean rooms, refrigerators, and plant areas. May be attached to the outside of a window to view outdoor temperatures. Transparent display with 31.7 mm-high digits show current and minimum/maximum temperatures. Automatically clears and updates the Min/Max readings daily. Range: −25.0 to 70.0°C. Resolution: 0.1°. Accuracy: ±1°C.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: mounting tape, Velcro®, battery, and Traceable® Certificate. Size: 88 x 107 x 19 millimetres. Weight: 226 g.

Description	Cat. No.
Fisher Scientific Traceable® Big-Digit See-Thru™ Thermometer	15-077-960



Econo Traceable® Refrigerator Thermometer



Inexpensive refrigerator thermometer switchable range is from 14.2 to 131.0°F and -9.9 to 55.0°C with a resolution of 0.1°. Accuracy is ± 1 °C in the range of 5 to 25°C and ± 1.5 °C outside range. Ultra[™] model accuracy is ± 0.5 °C at tested points. Secure suction cup and Velcro[®] allow unit to be located anywhere. Display updates every 30 seconds. This allows capturing a reading without any effect from an open refrigerator door. Wide range of the thermometer also makes it an ideal unit to monitor temperatures in storerooms, labs, offices, hoods, and cabinets.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Easy-view, see-through-display LCD digit height is 12.7 mm. Supplied: long-life battery. Size: 25.4 x 63 x 9.6 millimetres. Weight: 14 g.

Description	Accuracy	Cat. No.
Fisher Scientific Econo Traceable® Refrigerator Thermometer	±1°C	15-077-944
Fisher Scientific Econo Traceable® Ultra™ Refrigerator Thermometer	±0.5°C at tested points	15-077-975





Traceable® RTD Platinum Thermometer



Fast, one-key operation

Read degrees Fahrenheit or Celsius at the flick of a switch. Innovative 0.01° digital thermometer developed specifically for lab and plant use is the finest-performing RTD Platinum Thermometer ever designed. Precise answers make it ideal for experimental requirement. Ease of use makes it perfect for routine quality-control needs. One-key operation allows everyone in lab to report identical readings and eliminates operator technique errors. State-of-the-art, fourth-generation aerospace engineering incorporates the most modern and sophisticated electronics in temperature measurement to achieve utmost in precision, stability, and dependability. High-precision thermometer is geared specifically for measuring temperatures in soil, foods, ovens, cuvettes, gas systems, water baths, wastewater, incubators, chemical solutions, petroleum products, and extremely cold conditions. Manufactured for years of reliable service, even in severe environments.

Accuracy delivers on-the-dot readings

Resolution is 0.01° below 200° and 0.1° above 200°. Accuracy is $\pm (0.1\% + 0.2^{\circ}\text{C})$ below 200°C and $\pm (0.15\% + 0.5^{\circ}\text{C})$ above 200°C. HOLD key freezes display for reading later. Fail-safe display shows low battery and probe condition. Readings are updated 2.5 times per second. Jumbo, 12.7 mm-high digits and bright, high-contrast LCD make the thermometer easy to read. Computer output allows thermometer to be connected to computer or data logger for capturing and storing results. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Platinum (100-ohm) 4-wire probe is triple-purpose for liquids, air/gas, and semisolids. Probe range is -58 to 752° F and -50 to 400° C. Probe: length 152 mm, diameter 3.3 mm, overall length 228 mm, 1 m cable. Supplied: probe, battery, Traceable® Certificate. Size: $177 \times 76 \times 31$ mm. Weight: 269 g.

Description	Cat. No.
Fisher Scientific Traceable® RTD Platinum Thermometer	15-077-55
Data Acquisition System (complete description on page 96)	11-661-22
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76



Computer Output

Wireless Capable (see page 95)

	Page	Traceable®				Lei	ıgth	Waterproof: Total Unit/		Display
Cat. No.	No.	Certificate Supplied	Range	Resolution	Accuracy (°C)	Probe	Cable	Cable/Probe	Alarm	Min/Max
15-077-961	23	Yes	–99 to 199.9°C	0.1°	±2°C	127 mm	3 m	n/n/y	no	no
15-077-14	26	Yes	-200 to 1370°C / -328 to 2498°F	0.1° / 1°	±1.0	3 mm	1 m	n/y/y	yes	yes
15-077-11	26	Yes	–40 to 1200°C	1°	±(1 + 1%)	3 mm	1.3 m	n/y/y	no	no
14-649-80/81	26	Yes	–50 to 750°C or –58 to 1382°F	1°	±(1 + 0.75%)	3 mm	1.3 m	n/n/y	no	no
15-078-39	27	Yes	-50 to 1300°C / -58 to 1999°F	1°	±0.3% + 1°C	3 mm	1 m (2)	n/y/y	no	max only
15-078-38	27	Yes	–50 to 1300°C / –58 to 1999°F	1°	±0.3% + 1°C	3 mm	1 m	n/y/y	no	max only
15-078-3A	28	Yes	-50 to 1230°C / -50 to 1999°F	0.1°	±0.3% + 1°C	3 mm	1.5 m	n/y/y	no	no
15-078-186	28	Yes	-200 to 1300°C / -328 to 2372°F	0.1° / 1°	±0.3% + 1°C	3 mm	1.2 m	y/y/y	no	yes
15-078-187	29	Yes	-50 to 1300°C / -58 to 2000°F	0.1° / 1°	±0.3% + 1°C	3 mm	1.2 m	n/y/y	no	max only
15-078-2	29	Yes	-200 to 1370°C / -328 to 2498°F	0.1°	±1.0	158 mm	1 m	n/n/y	no	yes
15-077-26	30	Yes	-50 to 1230°C / -50 to 1999°F	0.1°	±(1 + 0.75%)	3 mm	1.2 m (2)	n/y/y	no	yes
14-649-82	30	Yes	-50.0 to 1300°C / -58.0 to 2372°F	0.1°	±(1 + 0.75%)	127 mm	1 m	n/n/y	no	no



Traceable® Total-Range Thermometer



Total-Range Thermometer reads -200 to 1370°C

Thermometer reads from –328 to 2498°F and –200 to 1370°C with a resolution of 0.1° and 1°. Switch from °F to °C at the touch of a key. Jumbo-size, 15 mm-high digits are readable from 3 metres away. Unit features HOLD key that freezes display to capture current reading. A microprocessor updates the display twice a second. Rugged unit is constructed of shock-resistant ABS plastic. Water-resistant case stops dirt, dust, fumes, and water—perfect for use in lab or plant's worst environment.

Use with all Type-K probes

Meter-only accuracy: ±1°C between -50°C to 740°C, otherwise ±2°C. At the touch of a key, recalls minimum and maximum temperature readings captured during any time. Alarm function may be set in 1° increments. Alarm sounds when the temperature rises above or falls below high/low set points. Count-up timer alarm may be set from 23 hours 59 minutes to 1 minute. Alarm sounds when time is up. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: flip-open stand, Traceable® Certificate, batteries, Type-K beaded probe, 1 m cable. Size: 82 x 177 x 38 mm. Weight: 226 g.

(For a complete description of Type-K accessory probes see page 31.)

Description	Cat. No.
Fisher Scientific Traceable® Total-Range Thermometer	15-077-14



Traceable® Pocket-Size™ Type-K Thermometer

Shockproof, pocket-size thermometer is ideal for lab, plant, and field use. New microchip design provides ultra low cost unit. Wide-range, fast-response, and one-switch operation make it the perfect routine thermometer. It is compatible with all Type-K probes. Range is -58 to 1382° F or -50 to 750° C, with a resolution of 1° and meter accuracy of $\pm (1^{\circ}$ C + 0.75°) between 0 to 500° C and $\pm (1^{\circ}$ C + 1° M) 500 to 750° C. Below 0 accuracies are: -20° C $\pm 2^{\circ}$ C, -40° C $\pm 4^{\circ}$ C, and -50° C $\pm 5^{\circ}$ C. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Comes ready to use with a fast-response, Type-K probe with beaded sensor, 1.3 m cable, nylon carrying case, and battery. Size: 69.8 x 107 x 22 millimetres. Weight: 113 g.

(For a complete description of Type-K accessory probes see page 31.)

Description	Cat. No.
Fisher Scientific Traceable® Pocket-Size™ Type-K Thermometer	14-649-80
Fisher Scientific Traceable® Pocket-Size™ Type-K Thermometer	14-649-81





Traceable® Expanded-Range Thermometer

Pocket-size, Expanded-Range Thermometer is inexpensive

Shockproof, pocket-size thermometer is ideal for lab, plant, and field use. Expanded-range, fast-response, and one-switch operation make it the perfect routine thermometer. Range is -40 to 1200° C. Resolution is 1° and meter only accuracy is $\pm (1^{\circ}$ C + 1%) from 0 to 750° C. Two probes allow simultaneous monitoring of two tests. This thermometer is designed for simple operation. Three-position switch indicates probe 1, probe 2, or off. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).



Comes ready to use with two fast-response, Type-K beaded sensors, battery, and 1.3 m cable. Size: $76 \times 127 \times 25.4$ mm. Weight: 113 g.

Description	Cat. No.
Fisher Scientific Traceable® Expanded-Range Thermometer	15-077-11







User Adjustable Calibration Offsets

Traceable® Two-Channel Thermometer with Offsets



Provides recessed front panel adjustable offsets on two channels allowing user to adjust thermometer exactly to a specific temperature, in-house calibration, or particular sensor for increased accuracy.

Shockproof rubber case

Provided rubberized case makes it a virtually environment-proof instrument for all weather, shock, and abusive conditions.

Temperatures to 1300°C

Large LCD shows temperatures of probe 1, probe 2, or the difference (delta) of the two probes. Readout in °F and °C. Temperature range is –58 to 1999°F and –50 to 1300°C. Resolution is 1°. Meter only accuracy is ±0.3% plus 1°C. Nineteen-millimetre display is readable from 3.6 metres. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Stores highest temperatures reached

MAX key captures the highest reading achieved. HOLD key freezes display to capture current reading. Uses all Type-K thermocouples. Supplied: Velcro® strap, stand, two probes, and Traceable® Certificate. Size: 69.8 x 133 x 31 mm. Weight: 156 g.

(For a complete description of Type-K accessory probes see page 31.)

Description	Cat. No.
Fisher Scientific Traceable® Two-Channel Thermometer with Offsets	15-078-39

Traceable® Digital Thermometer with Recorder Output



Recorder jack provides a millivolt signal output. This enables thermometer to be used with any chart recorder, strip recorder, or computer that accepts millivolt signals.

Output results on demand

Monitor conditions in chambers, clean rooms, food processing, scientific labs, and all temperature-sensitive manufacturing operations. Recorder output provides a hard copy for today's stringent QC documentation requirements. Output specifications are 1 mV output per degree in 0.1° display mode and 0.1 mV output per degree in the 1° display mode. Range is -50 to 1999°F and -50 to 1300°C, with a meter-only accuracy of $\pm 0.3\%$ of the reading plus 1°C. Resolution is 0.1° from -50.0 to 199.9° and is 1° for other readings.

Stores highest readings reached

MAX key captures the highest reading achieved. HOLD key freezes display to capture current reading. Uses all Type-K thermocouples. Large, bright, 12.7 mm-high, four-digit LCD can be read from 3 metres away. Unit is completely portable and designed for years of dependable and reliable service.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Comes ready to use with fast-response, Type-K beaded probe with 1 m cable, battery, recorder output jack, and Traceable® Certificate. Size: 69.8 x 133 x 31 millimetres. Weight: 156 g.

Description	Cat. No.
Fisher Scientific Traceable® Digital Thermometer with Recorder Output	15-078-38





Traceable® Dual-Channel Thermometer



Thermometer shows two probe readings and the difference between readings

Monitors temperatures using two probes. Dual-display simultaneously shows temperature of both probes or temperature of one probe and the difference between probes (T1-T2). With two separate sensors, it is easy to note temperature variations in an incubator/oven or temperature gradations in a water bath. Sense changes between inlet and outlet temperatures in any system. HOLD key freezes the display.

Temperature range to 1230°C

Temperature ranges are -50.0 to 1999°F and -50.0 to 1230°C. Resolution is 0.1° under 200° and 1° above 200°. Meter-only accuracy is 0.3% plus 1°C. Extra-large, 19 mm-high display is readable from 3.6 m. Uses all Type-K thermocouple probes.

Chemical-and shock-resistant case

Ideal for quality control, measuring temperatures in petroleum products, and biotechnology applications. Case is chemical and shock-resistant ABS plastic. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: battery, two fast-response Type-K beaded probes, 1.5 m cable. Size: 177 x 76 x 31 mm. Weight: 269 g.

(For a complete description of Type-K accessory probes see page 31.)

Description	Cat. No.
Fisher Scientific Traceable® Dual-Channel Thermometer	15-078-3A



Traceable® Waterproof Type-K Thermometer





Wide range thermometer reads -200 to 1300°C

Thermometer reads from –328 to 2372°F and –200 to 1300°C with a resolution of 0.1° and 1°. Switch from °F to °C at the touch of a key. Bright, 15 mm-high digits are readable from 3 metres away. Back-lighting key permits reading in dark areas. Unit features HOLD key that freezes display to capture current reading. Battery powers unit for 1 year of routine use.

Waterproof to seal out moisture

One of the most technically advanced, fastest-reading, yet easy-to-use thermometers ever designed. A micro-processor updates the display 2.5 times per second. Rugged unit is constructed of shock-resistant ABS plastic. Waterproof design stops dirt, dust, fumes, and water—perfect for use in lab or plant's worst environment. Supplied rubber boot for probe connector allows the unit to remain waterproof with thermocouple attached. At the touch of a key, recalls minimum and maximum temperature readings. Meter-only accuracy: ±0.3% of the reading plus 1°C between –200°C to 1000°C, otherwise 0.5% of the reading plus 1°C. Unique differential feature shows the difference in temperature from a set point. Uses all Type-K thermocouple probes.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Designed for rough handling

Supplied: carrying case, Traceable $^{\circ}$ Certificate, battery, and fast-response, Type-K beaded probe with cable length of 1.2 m. Size: 67 x 177 x 31 mm. Weight: 226 g.

Description	Cat. No.	
Fisher Scientific Traceable® Waterproof Type-K Thermometer	15-078-186	







Traceable® Big Digit Type-K Thermometer





Wide-range thermometer reads -50 to 1300°C

Thermometer reads from -58 to 2000° F and -50 to 1300° C with a resolution of 0.1° and 1° . Switch from $^{\circ}$ F to $^{\circ}$ C at the touch of a key. Easy-to-read big digits measure over 15 mm-high and are readable from 4.5 m away. Unit features HOLD key that freezes display to capture current reading. Max Hold feature permits capturing and displaying the highest temperature achieved over any time period.

Innovative design, simple operation

Intuitive, four-key operation makes it easy to use. Microprocessor updates the display 2.5 times per second. Rugged unit is constructed of shock-resistant ABS plastic. Meter-only accuracy: $\pm 0.3\%$ of the reading plus 1°C between -50°C to 1000°C, otherwise 0.5% of the reading plus 1°C. Uses all Type-K thermocouple probes.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: carrying case, Traceable® Certificate, battery, and fast-response, Type-K beaded probe with 1.2 m cable. Size: 76 x 184 x 31 millimetres. Weight: 198 g.

(For a complete description of Type-K accessory probes see page 31.)

Description	Cat. No.
Fisher Scientific Traceable® Big Digit Type-K Thermometer	15-078-187

Traceable® Memory Wide-Range Thermometer



Thermometer temperature range covers -328 to 2498° F and -200 to 1370° C. Resolution is 0.1 from -200 to 640° C (-328 to 990° F) otherwise 1°. Meter only accuracy is $\pm 1^{\circ}$ C.

Triple-purpose probe

Supplied stainless-steel, triple-purpose, Type-K thermocouple probe may be used to measure temperatures of liquids, air/gas, and semisolids. Large, 12.7 mm-high LCD is easy to read. Thermometer accepts any Type-J, K, or T probe. Minimum and maximum readings may be recalled instantly. Unit features backlit display so that answers may be read in poor lighting—even total darkness. Computer output allows thermometer to be connected to a computer or data logger for capturing and storing readings. Count-up timer provides a relative time measurement while taking temperatures and recording Min/Max memories.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: stainless-steel Type-K thermocouple probe, battery, and Traceable® Certificate. Size: 69.8 x 177 x 31 millimetres. Weight: 184 g.

Description	Cat. No.
Fisher Scientific Traceable® Memory Wide-Range Thermometer	15-078-2
Data Acquisition System (complete description on page 96)	15-077-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76







Computer Output







Traceable® Double Thermometer



Serial computer output allows thermometer to be connected to computer or data logger for capturing and storing results. Resolution is 0.1° (from -50.0 to 199.9°F) and 1° in both °C and °F over the entire range of -50 to 1999°F or -50 to 1230°C. Meter only accuracy is ±(1 + 0.75%). Memory recalls maximum and minimum readings. HOLD key freezes display for reading later. Dual channels permit monitoring two separate probes. Dual display simultaneously shows temperature of both probes or temperature of one probe and the difference between probes (T1-T2).

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Digits are 19 mm high. Case is impact-resistant ABS plastic. Uses all Type-K thermocouple probes. Supplied: two fast-response probes, two 1.2 m cables, battery, and Traceable® Certificate. Size: 177 x 76 x 31 mm. Weight: 269 g.

(For a complete description of Type-K accessory probes see page 31.)

Description	Cat. No.	
Fisher Scientific Traceable® Double Thermometer	15-077-26	
Accessories		
Data Acquisition System (complete description on page 96)	11-661-22	
Data Logger (complete description on page 96)	06-662-72	
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76	





Computer Output



Traceable® Workhorse™ Thermometer

Type-K Workhorse™ Thermometer provides a sharp readout in dim and very bright light. Type-K range is -58.0 to 2372°F and -50.0 to 1300°C. Resolution is 0.1° between -50.0 to 200.0 and 1° elsewhere. Meter accuracy is $\pm (1^{\circ}C + 0.75\%)$ between 0 to 500°C; $\pm (1^{\circ}C + 1\%)$ 500 to 750°C; $\pm (1^{\circ}C + 1\%)$ 2%) 750 to 1000°C; ±(3°C + 4%) 1000 to 1200°C; ±2°C at -20; ±3°C at -40; and ±4°C at -50.

Recessed front panel adjustable offset allows user to adjust thermometer exactly to a specific temperature, in-house calibration, or a particular sensor for increased accuracy. HOLD key freezes display to capture current reading. It is compatible with all Type-K probes. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Supplied: fast response Type-K probe, bench stand, battery, and carrying case. Probe diameter is 3 mm, stem length 79 mm, overall 127 mm, and 1 m cable. Size: 69.8 x 139 x 31 mm. Weight: 170 g.



Description	Cat. No.
Fisher Scientific Traceable® Workhorse™ Thermometer	14-649-82





Traceable® Printing Thermometer



Printing Thermometer provides permanent record, prints time and date

Provides permanent record of temperature and time of day/date/month. Unit prints the time and date for maximum only, minimum only, average only, and in circularly mode T1, T2 and differential. Automatic printing may be programmed to print in any interval from 3 seconds to 23 hrs 59 mins 59 secs. The perfect unit to monitor temperature in lab, plant, and field. Fulfils federal requirements for CLIA specification 493.1252.

Hard copy results

Printer provides hard copy for today's stringent quality-control documentation. Minimum, maximum, and average temperature memories may be displayed or cleared at any time with the touch of a key. Memory feature permits monitoring conditions overnight, on weekends, or for any time period. Alarm may be set in 0.1° increments. Alarm sounds when temperature rises above or falls below set points. Alarm output feature may be used to trigger an external device. Displays temperatures from –328 to 2431°F and –200 to 1333°C with a resolution of 0.1° and an accuracy of ±1°C from –50 to 982°C, otherwise ±1.5°C. Dual probe inputs allow displaying the temperature of probe 1, probe 2, or the difference (delta) of probe 1 and 2. Thermometer will accept any Type- J, K, T, or E probe. Display is updated every second.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: two fast-response Type-K beaded sensors with 1.2 m cable, Traceable® Certificate, batteries, two thermal paper rolls (good for approximately 1400 printings per roll), ABS carrying case, and batteries. Accessory adaptor for continuous AC operation is available. Tough ABS plastic case is chemical- and shock-resistant. Unit is 190 x 76 x 38 mm. Weight: 283 g.

(For a complete description of Type-K accessory probes see below.)

Description	Cat. No.
Fisher Scientific Traceable® Printing Thermometer	15-077-16



Type-K Beaded Probe

Fast-response, Type-K thermocouple, beaded probe. PTFE cable can withstand temperatures of -40 to 250°C continuous or 300°C short-term use. Dimensions: 1.5 mm diameter probe with 1 m cable for use with all Type-K thermometers in liquids, air/gas, and semisolids.

Description	Cat. No.
Fisher Scientific Type-K Beaded Probe	15-077-45



Type-K Surface Probe

Stainless-steel probe with handle, is for use with Type-K thermometers. Temperature range is -73 to 760° C. Dimensions: 127 mm probe length; 12.7 mm tip diameter; 215 mm overall length. Supplied: 1 metre cable.

Description	Cat. No.	
Fisher Scientific Type-K Surface Probe	15-078-2A	



Stainless-steel Type-K Probe

Stainless-steel with handle, triple purpose (liquids, air/gas, and semisolids), Type-K (NiCr/NiAl) probe. Temperature range is –50 to 700°C. Dimensions: 3.3-mm diameter; 127 mm stem length; 190 mm overall length. Supplied: 1 metre cable.

Description	Cat. No.
Fisher Scientific Stainless-Steel Type-K	15-078-2B

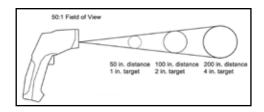


Infrared Thermometer Selection Chart

Cat. No.	Page No.	Traceable® Certificate Supplied	Range	Resolution	Accuracy (°C)	Field of View •	Emissivity	Laser	Min/Max Readings	Hi/Lo Alarms	Hold	Special Features
02-401-1	32	Yes	-22.0 to 110°C / -7.0 to 230°F	0.1°	±1°C	1:1	0.95 fixed	N/A	Yes	N/A	Yes	Key-chain
15-077-966	33	Yes	-33 to 220°C / -27 to 428°F	0.1°	±1 + 2%	1:1	0.95 fixed	N/A	N/A	N/A	Yes	Pocket-clip/strap/ key-chain
15-077-967	33	Yes	-55 to 250°C / -67 to 482°F	0.1°	±1 + 2%	6:1	0.5 to 1.00 in .01 steps	Yes	Yes	N/A	Yes	Wrist strap
06-664-39	33	Yes	–20 to 420°C / 0 to 788°F	1°	±2 or 2%	8:1	0.3 to 1.00 in .01 steps	Yes	Yes	Yes	Yes	9 memories
06-664-38	34	Yes	-60 to 500°C / -76 to 932°F	0.1°	±2 or 1%	11:1	0.95 fixed	Yes	MAX only	N/A	Yes	Trigger grip
06-664-254	34	Yes	-60 to 550°C / -76 to 1022°F	0.1°	±2 or 2%	12:1	0.1 to 1.00 in .01 steps	Yes	Yes	N/A	Yes	Dual lasers
15-077-57	35	Yes	-20 to 400°C / 4 to 752°F	0.1°	±3 or ±3%	7:1	0.2 to 1.00 in 0.1 steps	Yes	Yes	N/A	Yes	Trigger grip
15-077-968	35	Yes	-60 to 500°C / -76 to 932°F	0.1°	±1 + 2%	11:1	0.1 to 1.00 in .01 steps	Yes	Yes	Yes	Yes	Trigger grip
15-077-969	36	Yes	-50 to 1000°C / -58 to 1832°F	0.1° to 200, 1° over 200	±1.5% + 2°C	50:1	0.95 fixed	Yes	N/A	N/A	Yes	Trigger grip
15-077-970	36	Yes	–50 to 1000°C / –58 to 1832°F	0.1° to 200, 1° over 200	±1.5% + 2°C	50:1	0.1 to 1.00 in .01 steps	Yes	Yes	Yes	Yes	Trigger grip
15-077-56	36	Yes	-10 to 300°C / 14 to 572°F	0.1°	±2 or 2%	7:1	0.1 to 0.95 in .01 steps	N/A	Yes	N/A	Yes	Probe, 1 m cable

• What is Field of View?

Field of View is similar to a flashlight. The further the object is away, the bigger the diameter of the beam. The further you are from a sample, the larger the area the IR thermometer is measuring. For example: if the Field of View ratio for a thermometer is 6:1, then, when the thermometer is 152 mm from an object the sensor is looking at and measuring a 25.4 mm diameter. If the thermometer is 31 mm away, then the spot size being measured is 6.3 mm.



What is Emissivity?

Emissivity refers to the amount of infrared radiation an object emits. The emissivity adjustment on IR thermometers is used to compensate for different materials. The default emissivity of 0.95 covers 90% of typical applications. For thermometers with adjustable emissivity a materials chart with suggested settings is provided. Generally very shiny, highly reflective surfaces require low emissivity settings.

Traceable® Micro IR Thermometer



New generation in IR—the pocket revolution

Pocket-size, infrared thermometer captures temperature readings of any surface—liquids, solids, and semisolids in less than a second. Operation is simple—turn it on, point at sample, and take reading. Non-invasive, no-touch temperature measurements are ideal for food, life sciences, field use, clean rooms, and for fast inspections. Range is -7.0 to 230° F and -22.0 to 110° C with a resolution of 0.1° . Accuracy is $\pm 1^{\circ}$ C between 15.0 to 40.0° C, and $\pm 1.5^{\circ}$ C outside of this range. Emissivity is fixed at 0.95. Field of view is 1:1. Sophisticated break-thru and remarkable performance are a result of NASA-style microelectronics.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable®
Certificate is provided from an ISO 17025 calibration laboratory
accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are
all mutually recognised). It indicates traceability to standards provided
by NIST (National Institute of Standards and Technology). Features
include: easy-read 12.7 mm-high digital display, soft-touch keys, keychain, switchable °C/°F, hold, min only/max only readings, low battery alert. Size: 63 x 38 x
12.7 mm. Weight: 28.3 grams. (battery not included)

Description	Cat. No.
Fisher Scientific MiniiilR™ Traceable® Thermometer	02-401-1



Traceable® Infrared Thermometer with Pocket Clip



Traceable® Infrared Thermometer operation is simple

Turn on, point at sample, and take a reading in less than a second. Unit reads both Fahrenheit and Celsius of any surface—solids, semisolids, and liquids. Non-invasive, no-touch measurements are ideal for food, life sciences, pharmaceuticals, petroleum products, clean rooms, and electronics.

Temperature range is -27 to 428°F and -33 to 220°C. Resolution is 0.1°. Accuracy is ±1°C + 2%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Hold freezes the display at the current reading. Field of view is 1:1. The fixed emissivity of 0.95 covers 90% of all applications. Supplied: pocket clip, key-chain, lanyard, battery, Traceable® Certificate. Size: 82 x 19 mm. Weight: 19 g.

Description	Cat. No.
Fisher Scientific Traceable® Infrared Thermometer with Pocket Clip	15-077-966



Traceable® Infrared Laser Thermometer with Wristband



Traceable® Infrared Laser Thermometer is simple to operate—turn on, point at sample, and take a reading in less than a second. Unit reads both Fahrenheit and Celsius of any surface—solids, semi-solids, and liquids. Non-invasive, no-touch, measurements are ideal for food preparation, life sciences, pharmaceuticals, petroleum products, clean rooms, electronics, and field use.



Temperature range is -67 to 482°F and -55 to 250°C. Resolution is 0.1°. Accuracy is ±1°C + 2%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Hold freezes the display at the current reading. Field of view is 6:1. The emissivity is 0.05 to 1.00 in .01 steps. Minimum and maximum feature permits viewing highest and lowest readings at any time. Laser beam permits perfect sample target sighting. Supplied: wristband, Traceable® Certificate. Size: 101 x 50 x 19 mm. Weight: 63 g. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® Infrared Laser Thermometer with Wristband	15-077-967

Traceable® Infrared Thermometer with Memory/Alarm



Utilizes laser targeting for precise touchless measurement

Temperature range is 0 to 788°F and -20 to 420°C with a resolution of 1° and an accuracy of ±2°C or 2% of the reading. Small, lightweight, unit takes readings in under one second. Laser beam permits perfect temperature target sighting. Use in petroleum, electronics, plants, and outdoors. Use with liquids or solids. Keys permit adjusting emissivity from 0.3 to 1.0. Field of view is 8:1 (reads a spot the size of 50 mm from 406 mm away).

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Features include backlighting at the touch of a key, data hold freezes display reading, laser, maximum/minimum memory, 9 memories, high/low audible alarm, average readings, differential readings, low-battery indicator, and a °C/°F key. Size: 152 x 50 x 31 mm. Weight: 170 g. Supplied: wrist-strap, soft-sided carrying case, battery, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Infrared Thermometer with Memory/Alarm	06-664-39





Traceable® Infrared Thermometer Gun



Small, lightweight Traceable® Infrared Thermometer Gun takes instant, less-than-a-second, temperature readings of any surface. Unique design permits one-handed point-and-shoot readings. Laser-sighting beam permits aiming precisely at target surface. Use for food, pharmaceuticals, electronics, safety inspection, and any liquid or solid.

Range is -76 to 932° F and -60 to 500° C with a resolution of 0.1° . Accuracy: $\pm 2^{\circ}$ C + 1% of reading. Emissivity is fixed at 0.95. Field of view is 11:1 (reads a spot the size of 50 mm from 0.5 m away). Features include backlighting at the touch of a key, data hold freezes display reading, laser, low-battery indicator, automatic maximum recording, $^{\circ}$ C/ $^{\circ}$ F key, and an auto-off feature.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 177 x 76 x 38 mm. Weight: 170 g. Supplied: two batteries, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Infrared Thermometer Gun	06-664-38



Traceable® Infrared Dual Lasers Thermometer with Type-K Probe





Traceable® Infrared Dual Laser Thermometer, operation is simple—turn on, point at sample, and take a reading in less than a second. Dual lasers indicate the diameter of the surface area being measured and the white LED light illuminates the surface. Field of view is 12:1 (at a distance of 0.6 m the reading spot size is 50 mm). Unit reads both Fahrenheit and Celsius of any surface—solids, semisolids, and liquids. Non-invasive, measurements are ideal for food, life sciences, pharmaceuticals, petroleum products, clean rooms, electronics, and field use. Temperature range is –76 to 1022°F and –60 to 550°C. Resolution is 0.1°. Accuracy is ±2% of the reading or 2°C, whichever is greater.

The dual display shows current temperature plus one of the following eight modes: emissivity value, maximum memory, minimum memory, differential, average (time weighted), high temperature alarm, low temperature alarm, and probe temperature. Minimum and maximum feature permits viewing highest and lowest readings at any time. Thermometer displays the average of all readings made while taking measurements and the difference between two readings. Audible, user settable, high and low alarms signal out of range conditions. Display backlight permits viewing in low light conditions. For measurement of different types of material, adjustable emissivity may be set from 0.1 to 1.00 in increments of 0.01. Range using Type-K thermocouple jack is -83 to 2552° F and -64 to 1400° C.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Type-K beaded temperature sensor and two batteries are supplied with unit. Size: $177 \times 95 \times 50$ mm. Weight: 255 g.

Description	Cat. No.
Fisher Scientific Traceable® Infrared Dual Lasers Thermometer with Type-K Probe	06-664-254







Traceable® Infrared Thermometer with Trigger Grip



Traceable® Infrared Thermometer, operation is simple—turn on, point at sample, and take a reading in less than a second. Unit reads both Fahrenheit and Celsius of any surface—solids, semi-solids, and liquids. Non-invasive, no-touch, measurements are ideal for food preparation, life sciences, pharmaceuticals, petroleum products, clean rooms, electronics, and field use. IR temperature range: –76 to 932°F and –60 to 500°C. Resolution: 0.1°. Accuracy: ±1°C + 2%.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). The dual display shows current temperature plus one of the following eight modes: emissivity value, maximum memory, minimum memory, differential, average (time weighted), high temperature alarm, low temperature alarm, and probe temperature. Min/Max feature permits viewing highest and lowest readings at any time. Thermometer displays the average of all readings made and the difference between two readings.

Audible, user settable, high and low alarms signal out of range conditions. Memory permits recalling individually captured temperatures. Hold freezes the display at the current reading. Backlighting permits viewing in low light conditions. Adjustable emissivity from 0.1 to 1.00. Field of view is 11:1 (for example, at a distance of 0.5 m the reading spot size is 50 mm). Type-K thermocouple jack range: –83 to 2552°F and –64 to 1400°C. Supplied: Type-K probe, batteries, and Traceable® Certificate. Size: 177 x 69.8 x 38 mm. Weight: 170 g.

(For a complete description of Type-K accessory probes see page 31.)

Description	Cat. No.
Fisher Scientific Traceable® Infrared Thermometer with Trigger Grip	15-077-968



Traceable® Noncontact Temperature Infrared Thermometer

Portable noncontact, infrared temperature measuring thermometer features adjustable emissivity. This control provides the widest possible range for accurately measuring different surface temperatures. Unique gun design allows one-handed use.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Adjustable emissivity from 0.2 to 1.0. Field of view is 7:1 (at a distance of 0.5 m the reading spot size is 76 mm). Surface temperature range is switchable from –4.0 to 752°F and –20.0 to 400°C. Resolution: 0.1°. Accuracy: ±3°C or ±3% of the reading, whichever is greater.

Min/Max memory

Features data hold, maximum memory, minimum memory, and 1-second sampling. Dimensions: 196 x 120 x 59 mm. Weight: 272 g. Supplied: Traceable® Certificate, Type-K beaded probe, carrying case, and battery.

Description	Cat. No.
Fisher Scientific Traceable® Noncontact Temperature Indicator	15-077-57



Traceable® Infrared Wide-Range Thermometer Gun with 50:1 field of view



Infrared Thermometer Gun takes instant, less-than-a-second, temperature readings of any surface. Unique design permits one-handed point-and-shoot readings. Laser-sighting beam permits aiming precisely at target surface. It is ideal for food preparation, pharmaceuticals, field use, electronics, and safety inspection.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Range: –58 to 1832°F and –50 to 1000°C with a resolution of 0.1° to 200, 1° over 200. Accuracy: ±1.5% + 2°C. Field of view is 50:1 (reads a spot the size of 152 mm from 7.6 m away). Features include backlighting at the touch of a key, data hold freezes display reading, laser, low-battery indicator, and °C/°F keys. Size: 228 x 101 x 57 mm. Weight: 283 g. Supplied: battery, carrying case, and Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Infrared Wide-Range Thermometer Gun with 50:1 field of view (Emissivity is fixed at 0.95)	15-077-969
Fisher Scientific Traceable® Infrared Wide-Range Plus Thermometer Gun with 50:1 field of view (Emissivity adjustable from 0.10 to 1.00 in 0.01 steps. Also features minimum/maximum memory, average readings, and high/low alarms.)	15-077-970



Traceable® Infrared Digital Thermometer



Probe never comes in contact with surface or solution. Cable permits exact positioning of the sensor. Jumbo, 35 mm-high display may be switched from 14.0 to $572^{\circ}F$ and -10.0 to $300^{\circ}C$. Switchable resolution is 0.1° or 1° . Accuracy is $\pm 2^{\circ}C$ or 2° 0 of the reading.

Connects to computer or data logger

Serial, computer output allows the thermometer to be connected to a computer or data logger for monitoring and storing results.

Recalls high, low, and average readings

The field of view is 7:1 (at a distance of 0.5 m the reading spot size: 76 mm). Probe has an emissivity adjustment with a range of 0.1 to 0.95. This allows all types of material and liquid to be read. Sensor wavelength is 6 to 12 microns. Ultra-fast sampling rate is once per second. At the touch of a key, instrument recalls highest, lowest, and average readings. DATA HOLD key freezes display to capture readings. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: probe (152 x 38 x 38 mm), 1.2 m cable, Traceable® Certificate, battery, and computer output software. Size: 177 x 76 x 38 mm. Weight: 269 g.

Description	Cat. No.
Fisher Scientific Traceable® Infrared Digital Thermometer	15-077-56
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 95)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76



Computer Output



Traceable® Universal Thermometer with Alarm



Universal Thermometer is affordable and easy to use

Use this thermometer anywhere. Constructed of shock-resistant ABS plastic. Water-resistant case is sealed with an 0-ring gasket to stop dirt, dust, fumes, and water. Perfect for use in lab or plant's worst environment. Splash-proof pouch with shoulder strap protects unit and provides probe storage. Reads °F/°C on a jumbo, 19 mm-high LCD. Range is -58.0 to 500.0°F and -50.0 to 260.0°C. Resolution is 0.1° and accuracy is ± 1.0 °C or 1% of reading. Thermometer monitors temperature continuously for 3 years and features a selectable display update rate of 1 second or 10 seconds. A high and low alarm may be programmed in 1° increments. When temperature rises above or falls below the set points, a 1-minute audible alarm signals an out-of-range condition, and a symbol flashes on the LCD. The alarm mode may be switched off for use as a non-alarm thermometer. At the touch of a key, memory recalls highest and lowest temperature readings over any time period.

Countdown timer

Countdown timer function may be programmed in 1-minute increments from 99 hours 59 minutes (display shows hours, minutes, and seconds remaining). Unit sounds alarm when zero is reached. Accuracy is 0.01%.

Traceable to NIST for accuracy

To assure accuracy individually serial-numbered Traceable® Certificates for time and temperature are provided from an ISO 17025 calibration laboratory accredited by A2LA. They indicate traceability to standards provided by NIST (National Institute of Standards and Technology).

Total package

Supplied: Traceable® Certificates, probe, soft pouch, and two alkaline batteries. Triple-purpose, stainless-steel probe (liquids, air/gas, and semisolids) dimensions: diameter 3.5 mm, stem length 107 mm, overall length 203 mm. Cable length is 1 m. Size: 63 x 165 x 25.4 mm. Weight: 226 g.

Description	Cat. No.
Fisher Scientific Traceable® Universal Thermometer with Alarm	15-077-21





Traceable® Disposable Temperature Recorder

Monitor refrigerators, supply rooms, food storage, chemical warehouses, animal quarters, incubators, goods-in-transit, walk-in chambers, biological materials, and manufacturing plants.

Single-use, disposable recorder displays temperatures on a 1 m strip chart. Records for 10 or 40 days. Temperature range is -20 to $100^{\circ}F$ and -28 to $38^{\circ}C$. Displays both $^{\circ}F$ and $^{\circ}C$ on the same chart. Accuracy is $\pm 1^{\circ}C$ ($\pm 2^{\circ}F$). Solid-state, battery-driven, quartz-crystal controlled motor turns the chart with an accuracy of better than 1 second per day. Temperature sensor is bimetallic. It provides a permanent record, which is easy to read, duplicate, fax, scan, and file. It shows temperature and time/day of occurrence. Chart, marker, and battery are preloaded, simply pull a tab to begin recording. Eliminates messy pens, expensive instrumentation, confusing software, and training.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). A tamper evident seal maintains the integrity of unit and results. Recorded chart remains inside unit until seal is broken. Four-part form on the front permits writing start-time, date, location, and other pertinent information. The instrument, chart, four-part form, and Traceable® Certificate are all marked with the same serial number. They provide accurate, permanent, and complete documentation. Supplied: battery and Traceable® Certificate. Size: 133 x 98 x 63 mm. Weight: 283 g.

Description	Cat. No.
Fisher Scientific Traceable® Disposable Temperature Strip-Chart Recorder 10 Days	14-648-41
Fisher Scientific Traceable® Disposable Temperature Strip-Chart Recorder 40 Days	14-648-42





TIMER CHART

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Cat. No.	Page No.	Traceable® Certificate Supplied	Accuracy	Maximum Time	Resolution	Channels	Countdown/ Countup	Clock	Memory	Features
02-261-840	39	Yes	0.01%	100 Hours	1 Second	4	down/up	Yes	Yes	Personalise your timer
14-649-17	39	Yes	0.01%	100 Hours	1 Second	4	down/up	Yes	Yes	4-channel countdown/up
06-662-5	40	Yes	0.001%	100 Hours	1 Second	3	down/up	Yes	Yes	Continuous alarm
06-662-3	41	Yes	0.01%	20 Hours	1 Second	3	down/up	Yes	Yes	Triple-display
06-662-55	41	Yes	0.001%	10 Hours	1 Second	3	down/up	No	Yes	3 timing channels
14-648-34	41	Yes	0.01%	100 Hours	1 Second	3	down/up	Yes	Yes	Big-digit timer/clock
15-077-64	42	Yes	0.01%	100 Hours	1 Second	2	down/up	Yes	Yes	100-decibel alarm
06-664-251	42	Yes	0.01%	100 Minutes	1 Second	1	down/up	No	Yes	Automatic memory
06-664-252	42	Yes	0.01%	100 Hours	1 Second	2	down/up	No	Yes	Large display
06-662-46	43	Yes	0.01%	100 Hours	1 Second	3	down/up	Yes	Yes	3-line display
06-662-8	43	Yes	0.01%	24 Hours	1 Second	1	down	No	Yes	Memory
14-648-35	43	Yes	0.01%	24 Hours	1 Second	1	down/up	Yes	Yes	Repeat countdown and talking
06-662-44	44	Yes	0.01%	24 Hours	1 Second	2	down/up	Yes	Yes	2-channel countdown/up
06-662-16	44	Yes	0.01%	24 Hours	1 Second	1	down/up	Yes	Yes	Compact all-in-one
14-649-83	44	Yes	0.01%	24 Hours	1 second	2	down/up	Yes	Yes	Ultra-compact
06-662-47	45	Yes	0.01%	24 Hours	1 Second	2	down/up	Yes	Yes	Jumbo-display black
06-662-48	45	Yes	0.01%	24 Hours	1 Second	2	down/up	Yes	Yes	Jumbo-display white
14-649-15	45	Yes	0.01%	100 Hours	1 Second	1	down/up	Yes	Yes	Numbered keys
14-649-14	45	Yes	0.01%	100 Minutes	1 Second	1	down/up	No	No	Numbered keys
02-401-8	46	Yes	0.01%	20 Hours	1 Second	2	down/up	Yes	Yes	Two-line display
06-662-45	46	Yes	0.01%	24 Hours	1 Second	1	down/up	Yes	Yes	Lab-top
06-662-51	46	Yes	0.01%	100 Minutes	1 Second	1	down	No	Yes	Automatic memory
06-662-26	47	Yes	0.01%	100 Minutes	1 Second	1	down	No	Yes	Easy to use
06-662-50	47	Yes	0.01%	10 Hours	1 Second	1	down/up	Yes	Yes	Clock, timer, stopwatch
02-261-839	47	Yes	0.01%	100 Minutes	1 Second	1	down/up	No	Yes	Jumbo digits
02-401-7	48	Yes	0.01%	100 Minutes	1 Second	1	down	No	Yes	Memory
14-649-85	48	Yes	0.01%	166 Hours	1 Second	1	down/up	No	Yes	Times up, flashing LED
06-662-49	48	Yes	0.01%	20 Hours	1 Minute	1	down	No	No	Easy 3-key operation
06-662-23	49	Yes	0.005%	100 Hours	1 Second	1	down/up	No	Yes	Clips to everything
06-664-40	49	Yes	0.01%	100 Minutes	1 Second	1	down	No	Yes	Water-resistant
06-662-52	49	Yes	0.01%	24 Hours	1 Second	1	down/up	Yes	Yes	Lanyard
06-662	50	Yes	0.01%	20 Hours	1 Minute	1	down/up	No	No	Key-chain
06-662-2	50	Yes	0.01%	20 Hours	1 Minute	1	down	No	No	Postage stamp size
06-662-11	50	Yes	0.005%	100 Hours	1 Second	1	down/up	No	No	Key-chain
06-662-25	50	Yes	0.01%	20 Hours	1 Minute	1	down/up	No	Yes	Key-chain





Traceable® Extra, Extra, Large Digit Countdown Timer





Extreme 38 mm digit size for easy viewing from up to 18 metres away. Reliable, 3-key operation makes countdown settings in 1 second increments easy to program. Timer countdowns and alarms on single channel for ease-of-use. Counts up during alarming indicating elapsed time since alarming. Times up to 99 minutes, 59 seconds with one second resolution. Automatic Bounceback™ Memory for repetitive timing. Accuracy is 0.01%. Counts up in stopwatch mode.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: hanger, clip, bench stand, magnetic back, battery, and Traceable® Certificate. Size: 79 x 69.8 x 25.4 mm. Weight: 69.8 g.

Description	Cat. No.
Fisher Scientific Traceable® Extra, Extra, Large Digit Countdown Timer	15-081-100

Traceable® Multi-Coloured™ Timer



Personalise your timer, show your distinct style with customised bold colours

Three, bright, colourful frames permit personalization of timer. Counts down and alarms on 4 channels, and counts up during alarming indicating elapsed time since alarming. Automatic Bounceback™ Memory for repetitive timing. Times up and down from 99 hours, 59 minutes, and 59 seconds. Resolution is 1 second. Accuracy is 0.01%. Time-of-day clock (12/24 hour).

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: bench stand/clip, magnetic back, Traceable® Certificate, battery. Size: 69.8 x 57 x 12.7 mm. Weight: 69.8 g.

Description	Cat. No.
Fisher Scientific Traceable® Multi-Coloured™ Timer	02-261-840





Traceable® Four-Channel Alarm Timer

Easy on the eyes

Massive, 19 mm-high display permits viewing from across the lab. Microcomputer chip permits setting 4 separate channels. Set any countdown time from 99 hours, 59 minutes, 59 seconds to 1 second. When zero is reached, the timer starts counting up to show time elapsed since alarming. Additional features include stopwatch, time-out, and time-of-day clock.

All 4 channels may be used simultaneously in any combination to count down or count-up. At the touch of a key the remarkable memory returns the display to the previously programmed countdown time (perfect timer to dedicate to a repetitive test). Extra-loud, high-decibel alarm sounds for 1 minute or may be silenced manually. Finger-size keys make it easy to set times and change channels.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnetic back, flip-open stand, spring fastener, an opening for lanyard, battery. Accuracy: 0.01%. Size: 69.8 x 63 x 12.7 mm. Weight: 56 g.

Description	Cat. No.
Fisher Scientific Traceable® Four-Channel Alarm Timer	14-649-17





Traceable® Three-Channel Alarm Timer



Triple display

The ultimate user-friendly timer fulfills every lab's timing needs. Displays three different times simultaneously, counts down, and alarms. Also functions as a stopwatch and a time-of-day clock.

Three different tests may be run at the same time and channels may be started individually or simultaneously. Timer can concurrently signal the duration of incubating, heating, and cooling. Program each channel from 1 second to 99 hours, 59 minutes, and 59 seconds. When zero is reached, an alarm sounds, "TIME'S UP" flashes on the display, and timer begins counting up.

Adjustable alarm volume and duration

Adjustable alarm volume allows setting the timer to high for noisy areas or low for quiet environments. Alarm may be set to silence automatically after 1 minute or to sound continuously until turned off. The continuous setting makes certain that an alarm is never missed.



Memory recall

Memories return the display to the previously programmed time at the touch of a key. Perfect unit to dedicate to a group of repetitive tests. In the stopwatch mode, the timer counts up from zero. For increased flexibility, the display allows simultaneous up and down timing on different channels. Unlimited number of time-outs may be taken. Unit displays date and time of day to the second. Quartz-crystal accuracy is 0.001%. Four rubber feet keep the timer off a wet bench. Battery provides 1 year of continuous running. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: Traceable® Certificate, battery. Size: 82 x 76 x 25.4 mm. Weight: 85 g.

Description	Cat. No.
Fisher Scientific Traceable® Three-Channel Alarm Timer	06-662-5

Traceable® 100-Hour Timer



Reduce uncertainty in your life—own our friendliest timer

Counts down, alarms, times up, and tells time of day with uncompromising precision and is also very user-friendly. Innovative 100-Hour Timer fulfills virtually every lab timing requirement. Multichannels time down, time up, and tell time of day. It's the workhorse of the lab.

Timer operates on all channels simultaneously. It has five countdown channels, a stopwatch, and a time-of-day channel. Counts both up and down to 99 hours, 59 minutes, 59 seconds. Accuracy is 0.01%. Unique thru-zero feature allows counting down, alarming, and counting up. A time-out mode stops the timer for off periods in both up and down timing. T1 through T4 may be started simultaneously or individually.

Extra-large, 8.3 mm-high display and vivid LCD digits continuously show the time remaining and are readable from 1.8 m. Alarm may be turned off manually or is automatically silenced after 1 minute. A TIME IS UP message is flashed on the display.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnetic back, flip-open stand, spring fastener, an opening for lanyard, battery. Size: 69.8 x 60 x 15.8 mm. Weight: 42.5 g.

Description	Cat. No.
Fisher Scientific Traceable® 100-Hour Timer	06-662-9





Traceable® Original Lab Timer



Timer signals drying and incubating times, helps catch all test results, and even alarms for appointments. The ideal bench-mate for quality-control and experimental requirements. Extremely simple operation makes it the lab's most desirable timer.

Accuracy is 0.001%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Program three different activities from 9 hours, 59 minutes, 59 seconds to 1 second. Each channel has a distinct electronic alarm and display indicator. Alarm-off operates manually or is silenced automatically after 1 minute.

Large 6.3 mm-high LCD digits are easy to read. Carry it with you from the lab—mini-size and light weight make it portable. Chemical-resistant ABS plastic case is 76 x 76 x 35 mm. Weight: 113 g. Supplied: Traceable® Certificate, batteries.

Description	Cat. No.
Fisher Scientific Traceable® Original Lab Timer	06-662-55



Traceable® **Triple-Display Timer**

Easily manages three tests simultaneously

simultaneous countdown alarm timing of three tests. Extra-large, 12.7 mm digits are easy to read from across the lab. Times may be set from 19 hours, 59 minutes, 59 seconds to 1 second. When zero is reached, the timer starts counting up to show time elapsed since alarming. Additional features include stopwatch, time-out, and time of day.



Three different countdown times may be set and started simultaneously or each channel may be started individually. For repetitive tests, the memory returns the display to the previously programmed countdown time at the touch of a key.

Loud, high-decibel alarm sounds for 1 minute or may be silenced manually. Timer is perfect for dedicating to a test requiring several different times. Accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnetic back, battery. Size: 63 x 85 x 22 mm. Weight: 85 g.

Description	Cat. No.
Fisher Scientific Traceable® Triple-Display Timer	06-662-3



Traceable® Big-Foot Timer



Timer signals drying and incubating times, helps catch all test results, and even alarms for appointments. Pays for itself by saving just one missed lab analysis. Allows simultaneous programming of three different activities from 99 hours, 59 minutes, 59 seconds to 1 second.

Resolution is 1 second, accuracy is 0.01%. Each of the three channels has a distinct electronic alarm and display indicator when zero is reached. The alarm silences automatically after 1 minute. Any channel may also be used as a stopwatch or may be turned off manually. Superjumbo display shows time of day.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Big-Foot 25.4 mm high LCD digits may be read from 9 metres. Supplied: magnetic back, flip-open stand/spring-clip, battery. Size: 101 x 114 x 4.7 mm. Weight: 170 g.

Description	Cat. No.
Fisher Scientific Traceable® Big-Foot™ Timer	14-648-34

Digital/Multi-channel



Traceable® Extra-Extra-Loud Timer



One-hundred-decibel screamer

User-friendly timer features include countdown, stopwatch, time-out, and time-of-day clock. May be heard in the noisiest plant or lab. One hundred decibel alarm penetrates high noise areas clearly. A breakthrough for easily hearing a countdown alarm in high ambient noise conditions. Giant display permits viewing anywhere and is 19 mm-high. Micro computer chip permits setting two separate channels. Set any time from 99 hours, 59 minutes, 59 seconds to 1 second. When zero is reached the timer starts counting up to show time elapsed since alarming.

Perfect for high sound zones—indoors and out

Both channels may be used simultaneously as countdown, count-up, or in any combination of count-up/down. Memories return the display to the previously programmed countdown time at the touch of a key. The extra-extra-loud, one-hundred-decibel alarm sounds for 1 minute or may be silenced manually. Large keys make it easy to set times and change channels.

Traceable to NIST for accuracy

Quartz-crystal accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). It provides the accurate timing assurance demanded by government regulations and ISO 9000 requirements. Supplied: magnetic back, flip-open stand, batteries. Size: 101 x 63 x 12.7 mm. Weight: 141 grams.

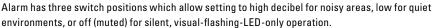
Description	Cat. No.
Fisher Scientific Traceable® Extra-Extra-Loud Timer	15-077-64

Traceable® Flashing LED Alert Big-Digit Alarm Timer

Easy on the eyes

Massive, 25.4 mm-high display permits viewing from across the lab. Microcomputer chip permits setting 3 countdown times into memory. Program the three most frequently used times and never set countdown times again. Use any countdown time from 99 minutes, 59 seconds to 1 second. When zero is reached, the timer starts counting up to show time elapsed since alarming.

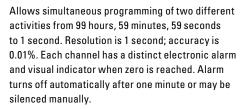
Unique green light flashes every second when the countdown time reaches 10 seconds. Red light flashes when zero has been reached and the alarm is sounding.



To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnetic back, stand/spring-clip, opening for a lanyard, two alkaline batteries. Accuracy: 0.01%. Size: 88 x 57 x 15.8 mm. Weight: 70 g.

Description	Cat. No.
Fisher Scientific Traceable® Flashing LED Alert Big-Digit Alarm Timer	06-664-251

Traceable® Flashing LED Alert Big-Digit Dual Channel Timer



Automatic or programmable memory

For repetitive timing, the microcomputer chip permits setting 2 countdown times into memory. The memory recalls the last countdown time set. Large 15 mm LCD digits may be read from 5.4 metres.



Unique visual indication for each channel when counting down, green light flashes every second once the countdown time reaches 10 seconds. Red light flashes when zero has been reached and the alarm is sounding. Alarm has three positions which allow setting to high decibel for noisy areas, low for quiet environments, or off (muted) for silent, visual-flashing-LED-only operation. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnetic back, stand/spring-clip, opening for a lanyard, two alkaline batteries. Size: 88 x 76 x 15.8 mm. Weight: 85 g.

Description	Cat. No.
Fisher Scientific Traceable® Flashing LED Alert Big-Digit Dual Channel Timer	06-664-252









Traceable® Talking Timer



Innovative countdown timer speaks in English. It counts down, talks, counts up, and tells time of day with Traceable® precision. Never again glance at your timer. During countdown, voice reporting frequency is every hour until 1 hour is reached, every 10 minutes until 10 minutes is reached, every minute until 1 minute is reached, every 10 seconds until 10 seconds remain, then every second. Also announces elapsed time since alarming.

Counts both up and down from 23 hours, 59 minutes, 59 seconds. Resolution is 1 second. Quartz-crystal timing accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Unique thru-zero feature allows counting down, alarming, and counting up. A time-out mode stops the timer for off periods in both up and down timing. Provides repeat functions of countdown alarm timing. Set it to count down for any time. When zero is reached, the timer alarms and begins to count down again from the programmed time. Repeat cycle continues automatically until stopped. Extra-large 12.7 mm-high display and vivid LCD digits continuously show the time remaining and are readable from 4.5 m. In the clock mode it announces time of day. Purchase several units; each may be set to a different alarm sound. Six distinct alarm sounds indicate which test is completed. Supplied: magnetic back, flip-open stand/clip, opening for lanyard, Traceable® Certificate. Size: 63 x 82 x 12.7 mm. Weight: 63 g.



Description	
Fisher Scientific Traceable® Talking Timer	14-648-35





Traceable® Three-Line Alarm Timer

User-friendly timer simultaneously displays three different countdown/ alarm times. Three unique channels may be started individually or concurrently and programmed to count down from 99 hours, 59 minutes, 59 seconds to 1 second. When zero is reached, an alarm sounds, TIME'S UP is displayed, and the timer begins counting up.

Memories return the display to the previously programmed time. Perfect unit to dedicate to a group of repetitive tests. May also be used as three stopwatches or in any combination of up/down timing. Display has a time-of-day clock.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Quartz-crystal accuracy is 0.01%. For ease in reading, the digits are 9.6 mm-high. Supplied: magnetic back, stand, Traceable® Certificate, and battery. Chemical-resistant ABS plastic case is 50 x 82 x 12.7 mm. Weight: 85 g.

Description	Cat. No.
Fisher Scientific Traceable® Three-Line Alarm Timer	06-662-46



Traceable® Memory Timer



Unique timer counts down with an alarm and remembers the setting. Program times from 24 hours to 1 minute in increments of 1 minute. The bright, crisp, 8.3 mm-high LCD digits read in hours, minutes, and seconds (seconds displayed during the last 10 minutes).

Forever memory

Unique memory returns the display to the previously programmed time at the touch of a key. Set the timer once and it remembers forever. Many users buy several, set the memory, and dedicate each to a test, water bath, or instrument. Loud-beeping alarm sounds for 60 seconds or may be turned off manually. Three-key operation makes it extremely simple to use.

Easy operation

Memory Timer's quartz-crystal timing is accurate to 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: clip/stand, and magnet, battery. Size: 60 mm diameter by 12.7 mm. Weight: 28.3 grams.

Description	Cat. No.
Fisher Scientific Traceable® Memory Timer	06-662-8



Traceable® Nano™ Timer



At the press of a key, timer displays countdown alarm time/stopwatch (count-up) time, and time of day (AM/PM and 24-hour format). Accuracy is 0.01%. High-decibel alarm sounds for 1 minute. Count down or up to 23 hours, 59 minutes, 59 seconds on the two timing channels.

For repetitive tests, the unit's two-channel memory automatically returns the display to the original programmed time. Nine and a half millimetre high digits may be read from 2.4 m.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: battery, clip, stand, magnet. Size: 63 x 50 x 22 mm. Weight: 70 g.

Description	Cat. No.
Fisher Scientific Traceable® Nano™ Timer	14-649-83

Traceable® Two-Memory Timer



Depend on Two-Memory Timer to deliver on-the-dot timing operations whether counting up or down from 23 hours, 59 minutes, 59 seconds. Features timing accuracy of 0.01% and 1-second resolution. It's also a time-of-day clock with user-selectable AM/PM or 24-hour format. A smooth, streamlined design and two-tone face make this an attractive companion for any lab bench. Bright LCD digits are 9.6 mm-high for easy viewing.

Times two tests at once

To perform two tests at once, both countdown timing channels may be started simultaneously. As each countdown time ends, a unique alarm sounds, and TIME'S UP flashes on the display. At zero, the display will begin counting up.

Take advantage of Timer's memory feature to perform countless repetitive tests. Both countdown timing channels may be set to recall a specific time. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 69.8 x 54 x 22 mm. Weight: 53 g. Supplied: magnet, flipopen stand/clip, batteries.

Description	Cat. No.
Fisher Scientific Traceable® Two-Memory Timer	06-662-44



Traceable® Advanced Memory Timer

Timer remembers the last time set, counts down, alarms, and counts up. Use it to count down/up from 24 hours to 1 second in increments of 1 second. One of the most versatile timers for the lab. The clock channel features time of day to the second with AM/PM indicators.

Timer signals duration of virtually every lab test, including drying, incubating, heating, and cooling times. Unit pays for itself by saving just one missed test result. The perfect unit to dedicate to a specific test or instrument. Remarkable memory returns the display to the previously programmed countdown time at the touch of a key and recalls hours, minutes, and seconds. Unique thru-zero feature allows counting down, alarming, and counting up. A time-out mode stops the timer for off periods in both up and down timing.

The loud beeping alarm may be turned off manually or is silenced automatically after 1 minute. Visual alarm displays TIMES UP. Digits are 8.3 mm-high for ease in viewing. Quartz-crystal design is accurate to 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnet, flip-open stand/clip, replaceable battery. Size: 57 x 57 x 12.7 mm. Weight: 42.5 g.

Description	Cat. No.
Fisher Scientific Traceable® Advanced Memory Timer	06-662-16









Traceable® Jumbo Timer



Allows simultaneous programming of two different activities from 24 hours to 1 second. Resolution is 1 second; accuracy is 0.01%. Each channel has a distinct electronic alarm and display indicator when zero is reached. The alarm may be turned off or it is silenced automatically after 1 minute.

For repetitive timing, a memory recalls the last countdown time set. A second display mode shows time of day and a stopwatch (for count-up timing). Jumbo, $25.4 \, \text{mm}$ -high LCD digits may be read from 9 metres. Use it flat, in the sit-up position, or wall-mount with the supplied bracket. Size: $95 \times 139 \times 12.7 \, \text{mm}$. Weight: 141 grams.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Description	Cat. No.
Fisher Scientific Traceable® Jumbo Timer (Black)	06-662-47
Fisher Scientific Traceable® Jumbo Timer (White)	06-662-48



Traceable® Alarm Timer/Stopwatch



Numbered keys make it a breeze to set a countdown time

Remarkable timer counts down with an alarm and counts up with a time-out feature. Program it to count down from 99 minutes, 99 seconds to zero in any second increment. In the stopwatch mode, the unit counts up to 59 minutes, 59 seconds, and automatically rolls over to zero and continues timing.



Large, 9.6 mm-high display and vivid LCD digits continuously show time and are readable from 2.4 metres. Loud, high-decibel alarm may be turned off manually or is automatically silenced after 1 minute. Individually numbered keys make setting time easy. Timer is accurate to 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnet, flip-open stand/clip, battery, opening for lanyard. Size: 63 x 57 x 12.7 mm. Weight: 42.5 g.

Description	Cat. No.
Fisher Scientific Traceable® Alarm/Stopwatch Timer	14-649-14

Traceable® 100-Hour Mini-Alarm Timer/Stopwatch



Versatile timer incorporates all lab timing

Memory

Counts down with an alarm and may be set to count up and alarm. It also has a memory. Set it once, press recall, and start counting down from the memory time. In the stopwatch mode it counts up from 1 second to 99 hours, 59 minutes, 59 seconds.



Countdown or count-up alarm

In the alarm mode it may be programmed to count down or up and alarm at any time from 1 second to 99 hours, 59 minutes, 59 seconds. Accuracy is 0.01%. The display shows the time remaining to alarm or elapsed time since alarming. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Individually numbered keys make setting time fast and easy. Extra-large, 9.6 mm-high LCD digits are readable from 2.4 metres. Extra-loud, high-decibel alarm is automatically silenced after 1 minute or may be turned off manually. TIME IS UP message is displayed when set time is reached. Unique thru-zero feature shows time elapsed since the alarm has sounded. Also shows time of day.

Supplied: magnetic back, flip-open stand/clip, opening for lanyard. Size: $69.8 \times 69.8 \times 12.7$ mm. Weight: 42.5 g.

Description	Cat. No.
Fisher Scientific Traceable® 100-Hour Mini-Alarm Timer/Stopwatch	14-649-15





Traceable® Double Display Timer



Timer allows simultaneous programming of two different activities from 20 hours to 1 second. Resolution is 1 second; accuracy is 0.01%. Each channel has a distinct electronic alarm and display indicator when zero is reached. Timer automatically counts up from zero to indicate time since alarming. The alarm may be turned off or is silenced automatically after 1 minute.

For repetitive timing, a memory recalls a set time. A second display mode shows the time of day and a stopwatch. Large 12.7 mm-high digits may be read from 3 m. To assure accuracy an individually serialnumbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Use it flat or in sit-up position. ABS impact-resistant case: 76 x 63 x 12.7 mm. Weight: 85 g. Supplied: clip, magnet, Traceable® Certificate, battery.

Description	Cat. No.
Fisher Scientific Traceable® Double-Display Timer	02-401-8



Traceable® Lab-Top Timer



Lab-Top Timer is built expressly for bench use. LCD screen is designed for viewing at any angle. Versatile timing modes, extra-large keys, make this unit ideal for the lab.

Counts down from 24 hours to 1 second, in second increments, with an accuracy of 0.01%. Special memory chip allows programming an instant replay repeat time which appears on the display at the touch of a key. Memory time is locked in until changed.

Unit features count-up mode and time-of-day clock. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: Traceable® Certificate, battery. Size: 82 x 82 x 44 mm. Weight: 113 g.

Description	Cat. No.
Fisher Scientific Traceable® Lab-Top Timer	06-662-45



Traceable® 99M/59S Timer



Timer counts down from 99 minutes, 59 seconds in second increments with 3-key ease and big-digit visibility. Automatic memory resets the display to the last programmed time—ideal for repetitive tests.

Quartz-crystal timing accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Nineteen mm-high digits are readable from 6 metres. Alarm sounds for 30 seconds. Size: 63 x 63 x 12.7 mm. Weight: 56 g. Supplied: battery, magnet, stand/ clip, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® 99M/59S Timer	06-662-51







Traceable® Triple-Purpose Timer

At the press of a key, big-digit timer displays countdown alarm time, stopwatch (count-up) time, or time of day (AM/PM and 24-hour format). Accuracy is 0.01%. Full keyboard (0-9 keys) makes entering times exceptionally fast. High-decibel alarm sounds for 1 minute. Count down or up to 9 hours, 59 minutes, 59 seconds.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). For repetitive tests, the unit's memory automatically returns the display to the original programmed time. Nineteen mm-high digits may be read from 6 metres. Supplied: battery, magnet. Size: 76 x 63 x 25.4 mm. Weight: 70 g.

Description	Cat. No.
Fisher Scientific Traceable® Triple-Purpose Timer	06-662-50

Traceable® Fingertip Timer

Easy-to-use timer has a repeat memory function for repetitive tests. Three-key operation can be learned in less than 10 seconds. Everyone in the lab will enjoy using this always-at-your-fingertips timer. May be placed on incubators, refrigerators, and ovens with the magnet on the back.

Counts down from 99 minutes, 59 seconds in 1-second increments.

Accuracy is 0.01%. Dedicate this unit to a specific test. Memory retains last programmed time, eliminating



the need to re-enter test times. Alarm may be silenced manually or turns off automatically after $30\ \text{seconds}.$

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 46 x 88 x 12.7 mm. Weight: 35 g. Supplied: battery, Traceable® Certificate, magnet, and Velcro®.

Description	Cat. No.
Fisher Scientific Traceable® Fingertip Timer	06-662-26

Traceable® GIANT-DIGIT™ Countdown Timer





View giant size digits on your timer from across the lab

Visible from shelves, in hoods, or perched on instruments. Giant-Digits™ with 33 mm digit height are viewable from 12 m. Counts down and alarms on single channel for easy use, and counts up during alarming indicating elapsed time since alarming. Three-key intuitive operation eliminates reading instructions. GIANT-DIGIT™ timer has Automatic Bounceback™ Memory for repetitive timing. Timing range is 99 minutes and 59 seconds. Resolution is 1 second. Accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: Traceable® Certificate, bench stand, magnetic back. Size: 84.5 x 76 x 12.7 mm. Weight: 69.8 g.

Description	Cat. No.
Fisher Scientific Traceable® GIANT-DIGIT™ Countdown Timer	02-261-839





Traceable® Instant-Recall Memory Timer



Input a time and the instant memory always returns the display to the programmed time. This is the ideal timer to dedicate to a routine tests. Bright, extra-large, 15 mm-high digits count down at any set time from 99 minutes 59 seconds to zero. At zero a loud 30-second alarm sounds.

Designed specifically for routine tests, quality control requirements, and repetitive analysis, it is the lab workhorse. The unique memory feature allows devoting timer to one piece of laboratory equipment such as a water bath, oven, stirrer, or incubator.

Accuracy is 0.01%. Replaceable battery powers the timer for three years of nominal use. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Magnetic back allows placing timer on metal surfaces. Suppled: stand, spring fastener clip. Size: 63 x 57 x 19 mm. Weight: 56 g.

Description	Cat. No.
Fisher Scientific Traceable® Instant-Recall Memory Timer	02-401-7





Traceable® QC Timer



Ideal QC (quality control) countdown and alarm timer combines easy, 3-key operation with giant-size digits. Learn its operation in less than 10 seconds without ever reading the instructions. Quartz-crystal timing accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Documentation provides the accurate timing assurance demanded by government regulations, ISO 9000 requirements, and QC needs.

Times may be set up to 20 hours in any one-minute increment. At zero, a 1-minute alarm sounds. Nineteen mm-high digits are readable from 6 metres. Size: 88 x 50 x 12.7 mm. Weight: 56 g. Supplied: battery, magnet/clip.

Description	Cat. No.
Fisher Scientific Traceable® QC Timer	06-662-49

Traceable® Visual Alarm Timer (9999M)



Timer counts down from 9999 minutes in minute increments and has a countdown resolution of 1 second for times under 99 minutes. With the flip of a switch, select either an audible alarm, or bright flashing LED visual alarm. Automatic memory resets the display to the last programmed time—ideal for repetitive tests. Thru-zero feature allows counting down, alarming, then counting up. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Nineteen mm high digits are readable from 3 metres. Size: $76 \times 57 \times 19$ mm. Weight: 85 g. Supplied with two batteries, an integrated magnet, stand, and clip.

Description	Cat. No.
Fisher Scientific Traceable® Visual Alarm Timer (9999M)	14-649-85





Traceable® Clip-It™ Timer



Clip-It[™] Timer counts down, alarms, and functions as a stopwatch

The handiest timer ever designed clips to your lab coat, belt, notebook, clipboard, or anywhere. You'll never lose your own personal timer.

Six-digit LCD shows time remaining in hours, minutes, and seconds

Program it in the countdown mode, in 1 second increments, from 100 hours to 1 second. At zero, a loud-beeping alarm sounds for 60 seconds or may be silenced manually. In the stopwatch mode, it times from 1 second to 99 hours and then repeats. Also has a time-out feature in both up and down counting.

Clip-It™ Timer is the perfect reminder

Notifies you when to read a colour change, remove a sample from an oven, or go to a meeting. Big-digit, 8.3 mm-high display is easy to read. Five-key operation is quick and intuitive (no need to ever read the instructions). Quartz-crystal accuracy is 0.005%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: magnet and battery. Size: 50 x 38 x 19 millimetres. Weight: 120 g. Patented.

Description	Cat. No.
Fisher Scientific Traceable® Clip-It™ Timer	06-662-23



Traceable® Water-Resistant, Flashing Timer



Water-resistant timer is ideal for wet labs, wash-down areas, plants, and field use

Times from 99 minutes, 59 seconds to zero with 1 second resolution. When zero is reached a bright red LED flashes as a visual sign and an audible alarm sounds for one minute.

Unit also features infinite timeouts. Accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: lanyard, suction cup, magnet, Velcro®, battery. Size: 77 diameter x 12.7 mm. Weight: 42.5 g.

Description	Cat. No.
Fisher Scientific Traceable® Water-Resistant, Flashing Timer	06-664-40

Traceable® Tie Timer 🦠



Wear this countdown timer

Know at a glance the time remaining with this timer on a lanyard. Extraordinarily lightweight, it's less than 28 g. Digits (12.7 mm-high) are readable even with your glasses off. Program it to count down and alarm from 24 hours to 1 second. Resolution is 1 second and accuracy is 0.01%. Touch-of-a-key operation permits instant-replay timing for repetitive testing. Memory never changes until you reprogram it.

Also has a stopwatch (count-up) and time-of-day display. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: Traceable® Certificate, battery. Size: 28.5 mm dia. x 61 mm length.

Description	Cat. No.
Fisher Scientific Traceable® Tie Timer	06-662-52







Costs so little, everyone needs one

The handiest timer ever designed clips to your lab coat, belt, notebook, clipboard, or anywhere. You'll never lose your own personal timer.

Six-digit LCD shows time remaining in hours, minutes, seconds

Program it in the countdown mode, in 1 second increments, from 100 hours to 1 second. At zero, a loud-beeping alarm sounds for 60 seconds or may be silenced manually. In the stopwatch mode, it times from 1 second to 99 hours and then repeats. Accuracy is 0.005%. Also has a time-out feature in both up and down counting.

Digital Timer Plus™ is the perfect reminder

Notifies you when to read a colour change, remove a sample from an oven, or go to a meeting. Big-digit, 8.3 mm-high display is easy to read. Five-key operation is quick and intuitive (no need to ever read the instructions). To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: key-chain, magnet, battery. Size: 50 x 38 x 19 mm. Weight: 120 g. Patented.

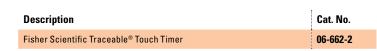
Description	Cat. No.
Fisher Scientific Traceable® Digital Timer Plus™	06-662-11

Traceable® Touch Timer

Four-digit LCD may be programmed to count down and alarm from 19 hours, 59 minutes to 1 minute in any minute increment. Two-key operation makes it extremely easy to use.

Loud-beeping alarm may be silenced manually or turns off automatically after 20 seconds. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Handy, postage stamp size designed to be used anywhere. Serves as the ideal lightweight reminder. Accuracy is 0.01%. Size: $25.4 \times 44 \times 6.3$ mm. Weight: 14 g.



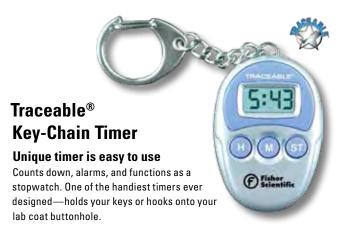


Four-digit LCD always shows the time remaining in hours and minutes. Program it in 1-minute increments from 20 hours to 1 minute. At zero, a beeping alarm sounds for 60 seconds or may be silenced manually. In the stopwatch mode, it times from 1 second to 20 minutes and then rolls over. Also has a timeout feature in both up and down counting.



Digits are 8.3 mm-high for ease in viewing. Three-key operation is fast. Resolution is 1 minute and quartz-crystal accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Timer has a rugged, chemical-resistant ABS case. Supplied: key-chain, battery. Size: 50 x 28.5 x 9.6 mm. Weight: 14.7 q.

Description	Cat. No.
Fisher Scientific Traceable® Pocket Timer	06-662



Four-digit LCD always shows time remaining in hours and minutes. Program it in the countdown mode in minute increments from 20 hours to 1 minute. When zero is reached, an alarm sounds for 60 seconds, or it may be silenced manually. In the stopwatch mode, it times from 1 second to 20 minutes and then repeats itself. Also has a time-out feature in both up and down counting.

Big-digit, 8.3 mm-high display is easy to read. Three-key operation is fast and intuitive. Designed for rugged use. Quartz-crystal timing accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Key-Chain Timer has a rugged, chemical-resistant ABS case. Supplied: battery. Size: 50 x 38 x 19 mm. Weight: 19 g.

Description	Cat. No.
Fisher Scientific Traceable® Key-Chain Timer	06-662-25

Touchtimer





Eight-Channel Alarm Timer

The only timer manufactured with a continuously-adjustable alarm-volume control. Can be set from whisper-low at the lab bench to ear-piercingly loud for noisy plant areas. Alarms may be set to sound continuously until turned off manually or set to turn off automatically: 7 secs or 1 min.

Eight channels

Three channels count down—each with a memory (memory allows automatic return to the previously programmed time at the press of a key). One channel counts down, and when zero is reached, alarms and starts counting up. The stopwatch channel counts up and alarms at any preset time. The 2 repeat channels automatically alarm at any programmed time interval (e.g., set it to continually sound an alarm every 37 min).

100-hour timing capacity

Clock channel displays time of day in AM/PM or 24-hour time. Each timing channel has a timing capacity of 99 hours, 59 minutes, 59 seconds. Extra-large, easy-to-read, headline-size, 12.7 mm-high LED digits are bright and sharp. Display can be read from 7.6 m away. Housed in an ABS plastic case. Size: 165 x 107 x 88 mm. Weight: 453 g. Unit operates on 115 VAC/60 Hz.

Description	Cat. No.
Fisher Scientific Eight-Channel Alarm Timer	06-662-6



Compact Timer

Set this ruggedly-built, mechanical compact timer from 1 to 120 minutes. A loud, 5-second alarm signals elapsed time for all lab tests. Moving pointer always shows time remaining to zero. High-impact ABS plastic construction makes it resistant to lab chemicals and virtually indestructible. The speed-read dial is graduated with oversized markings for easy reading. Selecting time automatically winds the timer. May be viewed from above or stands upright on the lab bench. Powerful spring ensures 99% accuracy. Size: 69.8 x 69.8 x 50 mm. Weight: just 95 g.

Description	Cat. No.
Fisher Scientific Compact Timer	06-659



60-Minute Interval Timer

Interval Timer is adjustable

Adjustable from 0 to 60 minutes in 1-minute increments. Setting pointer to desired interval winds the time automatically. Bell sounds at end of cycle. Indicating pointer always shows exact time remaining on easy-to-read dial. Stands on lab bench. Case is chemical resistant. Size: 95 x 95 x 50 mm.

	,	
Description	Cat. No.	
Fisher Scientific 60-Minute Interval Timer	06-662-10	

Quick Timer[™] & SX[™] Timer

SX-Timer[™] and Quick-Timer[™] are adjustable from 1 to 60 minutes in 1-minute increments. Turning the pointer to the desired countdown setting automatically winds the timers. Indicating pointer always shows exact time remaining. Loud five-second alarm sounds at zero. Easy-to-read, and use. Case is chemical resistant ABS plastic. Supplied: lanyard, key-chain.





Description	Cat. No.
Fisher Scientific SX-Timer™/pk 3 (translucent blue/white, dia. 57 x 25.4 mm, weight 63 g.) (pictured left)	14-649-58
$Fisher\ Scientific\ Quick-Timer^{TM}/pk\ 3\ (blue/white, with\ magnetic\ back,\ dia.\ 63\ x\ 25.4\ mm,\ weight\ is\ 85\ g.)\ (pictured\ right)$	14-649-57



Digital with Temperature & Humidity





Traceable® Calendar Thermometer Clock

This clock delivers time, room temperature, and calendar. Temperature displays degrees C or F to 0.5° (23 to 122° F and -5 to 50° C).

Extra-large LCD digits are $54 \, \text{mm}$ high to provide perfect visibility. Time can be shown in AM/PM or 24-hour time. Calendar shows month, date, and day of the week.

Clock's quartz-crystal timing accuracy is 0.01%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability, for time only, to standards provided by NIST (National Institute of Standards and Technology). Clock has a stylish, two-tone colour face and a slim silhouette (only 25.4 mm depth). Size: 234 x 254 mm. Weight: 538 g. Supplied: two batteries, wall-mount/screw, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Calendar/Thermometer/Clock	14-648-5



Traceable® Stick-It™ Mini-Clock

Traceable® Stick-It™ Mini-Clock is perfect for each work area. Bright hands and white sweeping second hand are easy to read. Rugged gleaming metal case is 0-ring sealed making it water-resistant/dustproof. Flat bottom permits standing on shelf, desk, or bench. Precise quartz-crystal accuracy is 0.013%.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). No winding is required. Size: 38 mm diameter x 7 mm depth. Weight: 28.3 grams. Supplied: Velcro®, double-backed tape, battery. Patented.

Description	Cat. No.
Fisher Scientific Traceable® Stick-It™ Mini-Clock	15-078-188

Traceable® Thermometer/Clock/Humidity Monitor

Sits on the bench or desk

Unique unit simultaneously displays time of day, temperature, and humidity. Clock displays AM/PM or 24-hour military time to the exact minute with 0.01% accuracy. Noting changes is easy with the triple display. Internal sensors make it ideal for use in hoods, storerooms, clean rooms, incubators, drying chambers, and environmental cabinets. Temperature range is 32.0 to 122.0°F and 0.0 to 50.0°C. Resolution is 0.1° and accuracy is ± 1 °C. Relative humidity range is 20 to 90%. Resolution is 1% RH and accuracy is ± 5 % RH midrange, otherwise ± 8 %. At the touch of a key, memory recalls highest and lowest temperature and humidity readings. Permits monitoring conditions overnight, on weekends, or any time period.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: Traceable® Certificate, battery, built-in stand, wall-mount/screw. Size: 107 x 57 x 12.7 mm. Weight: 70 g.

Description	Cat. No.
Fisher Scientific Traceable® Thermometer/Clock/Humidity Monitor	06-662-4







Traceable® Clock/ Thermometer/Humidity



At a glance tell time, temperature, and humidity in the lab. Clock with 0.01% quartz-crystal timing accuracy. Contrasting dials display temperature from -20 to 55°C and 10 to 130°F and humidity from 0 to 100%.

Sweeping second hand provides superior visibility. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability, for time only, to standards provided by NIST (National Institute of Standards and Technology). Supplied: battery, wall-mount/screw. Diameter: 317 mm. Weight: 453 g.

Description	Cat. No.
Fisher Scientific Traceable® Clock/Thermometer/Humidity	06-664-10

Traceable® Indoor/Outdoor Clock



Clock tells time of day to the second and shows temperatures from –4 to 104°F and –20 to 40°C with ±1.5°C accuracy.
O-ring sealed waterproof/dustproof ABS plastic impact-resistant case makes it ideal for wash-down areas, outdoors, and harsh environments. Quartz-crystal timing accuracy is 0.01%. Modern style clock design and bright blue sweep second hand may

be read at 4.5 metres.



To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability, for time only, to standards provided by NIST (National Institute of Standards and Technology). Case diameter: 177 mm, dial diameter: 127 mm. Weight: 340 g. Supplied: battery, wall-mount/screw.

Description	Cat. No.
Fisher Scientific Traceable® Indoor/Outdoor Clock	06-664-51



Traceable® Clock/Thermometer/Humidity



Ultra-modern design is high-tech in appearance. Shows crisp readable dials with a low profile case. It's the prestige clock to place on any wall. At six metres, read time, temperature, and humidity. Triple display shows precise quartz-crystal timing with 0.01% accuracy, temperatures from -34 to 116° F and -37 to 47° C with $\pm 1.5^{\circ}$ C accuracy, and relative humidity from 8 to 92% with $\pm 5\%$ accuracy.

Bright orange, sweeping second hand provides superior visibility. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability, for time only, to standards provided by NIST (National Institute of Standards and Technology). Low-profile slim design ABS plastic impact-resistant case: 304 x 279 x 25.4 mm. Weight: 0.7 kg. Clock dial diameter: 228 mm; temperature and humidity dial diameters: 76 mm. Supplied: battery, wall-mount/screw.

Description	Cat. No.
Fisher Scientific Traceable® Clock/Thermometer/Humidity	06-664-50

Analog

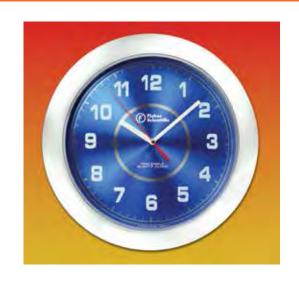
Traceable® Wall Clock



Tell time of day to the second with this attractive, 304 mm diameter wall clock. A worthy addition to every lab. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Quartz-crystal timing accuracy is 0.01%. Supplied: water/dust resistant sealed case, bright sweep second hand, Traceable® Certificate, battery, wall-mount/screw. Size: 304 mm diameter. Weight: 0.45 kg.

Description	Cat. No.
Fisher Scientific Traceable® Wall Clock	06-664-20





Traceable® Alchemist's Clock-for-the-good-times

Alchemist's Clock™ is a worthy addition to every lab. Its slim flat panel design, vivid colours, and bold graphic shapes will brighten every space.

Ancient symbols

Twelve classic symbols found in manuscripts and notebooks of medieval scientists were used. Clockwise from 1 o'clock they are Silver, Air, Laboratory, Fire, Water, Ammonium Chloride, Sulphuric Acid, Earth, Gold, Brandy (yes, brandy was a laboratory reagent!), Retort, and Iron. Each time you glance at your Alchemist Clock™ you'll be looking at the centuries-old heritage of pre-chemistry. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Bright, second hand, 0.01% quartz-crystal accuracy, Traceable® Certificate, battery, mounting screw, and circular, 304 mm diameter.

Description	Cat. No.
Fisher Scientific Traceable® Alchemist Clock™	06-664-9

STOPWATCH CHART

Cat. No.	Page No.	Traceable [®] Certificate Supplied	Accuracy	Timing Capacity	Resolution	Timing Functions (see page 55)	Features
14-649-56	55	Yes	0.01%	24 Hours	1/100 Second	A, B, C, D	Variety of Colours
14-648-4	56	Yes	0.001%	10 Hours	1/100 Second	A, B, C, D, E, F, G, H, I	300 memories
14-648-3	56	Yes	0.001%	24 Hours	1/100 Second	A, B, C, D	Jumbo digits
14-648-1	56	Yes	0.001%	24 Hours	1/100 Second	A, B, C, D	Extra-tough construction
14-649-18	56	Yes	0.01%	24 Hours	1/100 Second	A, B, C, D	Extra-tough construction
14-649-8	57	Yes	0.001%	10 Hours	1/100 Second	A, B, C, D, E, F, G, H, I	8 memories
14-649-5	57	Yes	0.0005%	10 Hours	1/100 Second	A, B, C, D, E	High accuracy
14-649-13	58	Yes	0.01%	100 Hours	1/100 Second	A, B, C, D, E, F, H	Pre-programmed countdown
14-649	58	Yes	0.0005%	20 Hours	1/100 Second	A, B, C, D, E, F	Triple-display, decimal timing, and 500 memories
06-662-56	59	Yes	0.01%	24 Hours	1/100 Second	A, B, C, D	Waterproof
14-648	59	Yes	0.0005%	10 Hours	1/100 Second	A, B, C, D, E	Dual display
14-649-11	59	Yes	0.01%	24 Hours	1/100 Second	A, B, C, D	Water-and-shock resistant
14-649-19	60	Yes	0.1%	24 Hours	1/100 Second	A, B, C, D	Disposable
06-662-40	60	Yes	0.001%	10 Hours	1/100 Second	A, B, C, D, E	Bench top
06-662-1	60	Yes	0.001%	999 Hours	1/100 Second	A, B, C, D, E, H	12 different events

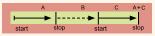


NINE UNIQUE TIMING FUNCTIONS

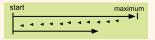
A.Single Action Timing: Pressing the start button begins timing, a second press stops the clock



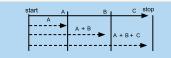
B. Time-out/Time-in: Records total elapsed time with any number of "time-outs". Permits stopping the timer for "off" periods, holds the reading where stopped, and starts again from that point.



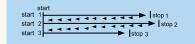
C. Continuous Timing: Digits offer a continuous display. When the maximum display is reached, digits rollover to zero and automatically begin timing again. Permits timing for hours, days, or weeks.



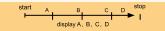
D. Cumulative Split: Freezes the display for partial event times while the internal clock continues to run and measure total elapsed time since starting the timer.



E. Interval Split: Yields a readout of each individual time increment of a connected series of events. Each press of the button displays the time interval since the previous press.



F. Memories: Capture and store separate times and display them while timing or after the event is over. Never look away from a lab test—even to take notes.



G. Countdown I (repeat): An alarm sounds at zero, program automatically repeats, counts down, and alarms again. It continues this sequence until stopped.



H. Countdown II: Allows setting unit to countdown. An alarm sounds at zero.



I. Sample Counter: Box on display shows sample number for each split taken.

1, 2, 3, 4...



Traceable® Kaleidoscope Digital Stopwatches



Digital Stopwatches add individuality to every user. Dedicate a translucent colour to a specific test or instrument. Unit times to 24 hours with 0.01 second resolution for the first thirty minutes, 1 second after that. Accuracy is 0.01%.

Breakaway, easy-safety-release lanyard enables fastening without placing over your head. Key-chain carabiner allows hooking the unit anywhere. Features include: single-action, time-out, cumulative-split, and continuous timing. As a chronograph, the stopwatch displays time of day in hours, minutes, and seconds, AM/PM, date, and day of the week. Also has a time-of-day alarm. Tactile-feel, clicks with a sound indicator, provide a positive action.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

LCD digits are 6.3 mm high. Stopwatch is 50 x 57 x 12.7 mm and weight is 28.3 grams. Supplied: Traceable® Certificate, battery, lanyard, and key-chain carabiner.

Description	Cat. No.
Fisher Scientific Traceable® Kaleidoscope Stopwatch, Shocking Red /pk 3	14-649-50
Fisher Scientific Traceable® Kaleidoscope Stopwatch, Sunrise Yellow/pk 3	14-649-51
Fisher Scientific Traceable® Kaleidoscope Stopwatch, Inspirational Blue /pk 3	14-649-52
Fisher Scientific Traceable® Kaleidoscope Stopwatch, Forest Green /pk 3	14-649-53
Fisher Scientific Traceable® Kaleidoscope Stopwatch, Plum Purple /pk 3	14-649-54
Fisher Scientific Traceable® Kaleidoscope Stopwatch, Shadow Grey/pk 3	14-649-55
Fisher Scientific Traceable® Kaleidoscope Stopwatches (6pk assortment) (includes 1 each of above)	14-649-56



Traceable® 300-Memory Stopwatch



Stopwatch times to 9 hours, 59 minutes, 59 seconds, 99 hundredths. Resolution is 1/100 of a second and accuracy is 0.001%. Provides stopwatch functions: single-action, time-in/-out, continuous-timing, cumulative-split, interval-split, 300-memories, and repetitive programmable countdown alarm times. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Three-line display simultaneously shows running time, cumulative-split, and interval-split. Unit recalls 300-memories and displays sample numbers 1 through 300. Can recall memories both during and after event timing. Interval split also shows longest, shortest, and average times. Provides repeat functions of countdown alarm timing. Set it to count down at any time from 10 hours to 1 second. When zero is reached, alarm sounds and unit begins to count down again from the programmed time. This repeat cycle continues automatically until stopped. Display always shows running time remaining to zero and cycles counted from 1 to 300. Functions also include: pacer, stroke, and speed calculations.

Water-resistant, O-ring-sealed, and shock-resistant ABS plastic case has non-skid rubber sides—ideal for lab and plant use. As a chronograph, the unit displays time of day in hours, minutes, and seconds, AM/PM, date, and day of the week. It also has a time-of-day alarm. Stopwatch is 76 x 63 x 22 mm. Weight: 70 g. Supplied: detachable clip, Velcro®, Traceable® Certificate, lanyard. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® 300-Memory Stopwatch	14-648-4

Traceable® Jumbo-Digit Stopwatch



Traceable® Jumbo-Digit Stopwatch with handy clip

Large stopwatch digits, 12.7 mm high provide ease in reading. Times to 24 hours. Unit features single-action, time-out, cumulative-split, and continuous timing. Timing resolution is 1/100 of a second for the first 30 minutes. Unit continues timing to 23 hours, 59 minutes, 59 seconds with a 1-second resolution.

Accuracy is 0.001%. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Water-resistant, 0-ring-sealed, and shock-resistant ABS plastic case has non-slip rubber sides—ideal for lab and plant use. As a chronograph, the unit displays time of day in hours, minutes, and seconds, AM/PM, date, and day of the week. It also has a time-of-day alarm. Stopwatch is 76 x 63 x 22 mm. Weight: 70 g. Supplied: Velcro, Traceable® Certificate, lanyard, clip. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® Jumbo-Digit Stopwatch	14-648-3



3030300





Times to 24 hours

Workhorse LCD digital stopwatch reads times up to 24 hours. In the stopwatch mode, it provides single-action, time-out, cumulative-split, and continuous timing. Resolution is 0.01 second. Accuracy is 0.001% or 0.01%.

Chronograph

As a chronograph, the unit displays time of day in hours, minutes, and seconds, AM/PM, date, and day of the week. Also has a time-of-day alarm. Extra-tough ABS plastic shockproof construction makes the unit ideal for lab and plant use. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 60 mm diameter x 15 mm. Weight: 42.5 g. Supplied: battery, Traceable® Certificate, lanyard.

Description	Accuracy	Cat. No.
Fisher Scientific Traceable® Ultra™ Stopwatch/ Chronograph	0.001%	14-648-1
Fisher Scientific Traceable® Stopwatch/ Chronograph	0.01%	14-649-18







Traceable® Digital Stopwatch



Precise, Traceable® timing for enzyme tests, viscosity measurements, animal studies, and other timed lab tests. Made for scientists in industrial, educational, hospital, and governmental labs who insist on the finest instrumentation. Engineered for ease of operation, accuracy, and reliability.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Quartz-crystal design is accurate to 0.0005%.

Ten-hour timing

Functions include single-action, time-out, interval-split, cumulative split, continuous roll-over timing, and countdown alarm timing. Resolution is 0.01 second. Times to 9 hours, 59 minutes, 59 seconds, and 99 hundredths. Vivid, 12.7 mmhigh LCD digits are ideal for viewing in lab and field. Water-resistant ABS plastic case features tongue and groove craftsmanship and 0-ring construction to seal out moisture, dust, and fumes. Size: 63 x 76 x 19 mm. Weight: 70 q. Supplied: battery, Traceable® Certificate, lanyard.

Description	Cat. No.
Fisher Scientific Traceable® Digital Stopwatch	14-649-5

Traceable® 60-Memory Stopwatch



Three-line display simultaneously shows running time, cumulative split, and interval split. Sixty memories recall all splits, display sample numbers 1-60, and show interval split longest, shortest, and average times.

Stopwatch times to 9 hours, 59 minutes, 59 seconds, 99 hundredths. Accuracy is to 0.001%. Provides stopwatch functions of single action, time-in/-out, continuous timing, cumulative split, interval split, 60 memories, and programmable timing.

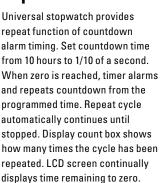
Provides repeat functions of countdown alarm timing. Set it to count down at any time from 10 hours to 1 second. When zero is reached, the timer alarms and begins to count down again from the programmed

time. Repeat cycle continues automatically until stopped.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). As a chronograph, the stopwatch displays time of day, date, and day of the week. It also has a time-of-day alarm. Size: 54 x 66.6 x 19 mm. Weight: 56 g. Supplied: Traceable® Certificate, lanyard. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® 60-Memory Stopwatch	14-649-9





The ideal stopwatch to dedicate to an analysis that must be noted at routine intervals. Resolution is 0.01 second. Provides stopwatch functions of single-action, time-in/-out, cumulative-split, interval-split, eight memories, and continuous timing. Accuracy is 0.001%.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: Traceable® Certificate, lanyard. ABS plastic shockproof case is 60 x 60 x 12.7 mm. Weight: 49 g. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® Stopwatch/Repeat Timer	14-649-8







Traceable® Decimal Stopwatch



Precise, Traceable® timing for enzyme tests, viscosity measurements, animal studies, and all timed lab tests. Made for scientists in industrial, educational, hospital, and governmental labs who insist on the finest instrumentation. Engineered for ease of operation, accuracy, and reliability.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Quartz-crystal design is accurate to 0.0005%—over 100 times more accurate than other stopwatches. Four timing formats/resolution are: hr/min/sec; 1/100 second; 1/1000 min; 1/100,000 hr. Maximum readouts are 19.999999 hours, 1199.999 minutes, 71999.99 seconds, or 19 hr/59 min/59 sec/99 hundredths. Stopwatch functions include single-action, time-out, interval-split, cumulative split, and continuous roll-over timing. Times to 19 hours, 59 minutes, 59 seconds, and 99 hundredths. Triple display shows cumulative splits, interval splits, and running time. Features 500 recallable memories displaying the lap, split, and running time. Memory feature also displays the fastest, slowest, and average lap time. The unit displays time of day, date, day of the week and features a time-of-day alarm. Additional features include countdown alarm, countdown then countup alarm, countdown repeat, pacer, and stroke.



Rugged, durable, water-resistant

Tough, water-resistant ABS plastic case features tongue and groove craftsmanship and 0-ring construction to seal out moisture, dust, and fumes. Size: 63 x 76 x 19 mm. Weight: 70 g. Supplied: lanyard, Traceable® Certificate. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® Decimal Stopwatch	14-649

Traceable® Big-Digit Stopwatch/Chronograph



Digital stopwatch reads time up to 24 hours. Accuracy is 0.0035%. Utility unit has complete stopwatch functions and full chronograph features. In the stopwatch mode it provides singleaction, time-out, cumulative split, and continuous timing. Resolution is to 0.01 second. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).



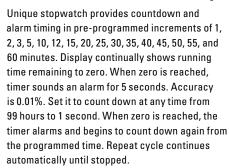
The extra-large display is 9.6 mm for easy reading. Times to 29 minutes, 59 seconds, 99 hundredths,

the unit automatically goes into an expanded range and times up to 23 hours, 59 minutes, and 59 seconds. As a chronograph, the unit displays time of day in hours, minutes, and seconds, AM/PM, date, and day of the week. Also has a time-of-day alarm.

Extra-tough ABS plastic shockproof construction makes the unit ideal for lab and plant use. Size: 60 x 15.8 mm. Weight: 42.5 g. Supplied: battery, Traceable® Certificate, lanyard.

Description	Cat. No.
Fisher Scientific Traceable® Big-Digit Stopwatch/Chronograph	14-649-7

Traceable® Countdown Stopwatch



The ideal stopwatch to dedicate to an analysis that must be noted at routine intervals. Stopwatch mode times up to 10 hours with 1/100-second resolution. Functions include single-action, time-in/-out, cumulative/interval-split, 8 recallable memories, and continuous timing.



The dual display timer mode can be used in three ways: Two different countdown times simultaneously, two independent countdown alarm timers, and two independent count up timers. This unit also has a pacer. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Extra-tough ABS plastic shockproof construction is perfect for use in the lab or field. Diameter: 63 mm, depth: 15 mm. Weight: 42.5 g. Supplied: Traceable® Certificate, lanyard. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® Countdown Stopwatch	14-649-13





Traceable® Waterproof/Shockproof Stopwatch



General-purpose stopwatch times to 24 hours. Features include: single-action, time-out, cumulative-split, and continuous timing. Timing resolution is 1/100 of a second for the first 30 minutes, then continues timing to 23 hours, 59 minutes, 59 seconds, with a 1-second resolution.

Waterproof to three atmospheres

O-ring-sealed and shock-proof ABS plastic case is ideal for lab and plant use. Unit is waterproof to three atmospheres. Tactile-feel, click switches provide a positive action. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

As a chronograph, the unit displays time of day in hours, minutes, and seconds, AM/PM date, and day of the week. Also has a time-of-day alarm. Accuracy is 0.01%. Digits are 6.3 mm-high. Size: 54 x 60 x 12.7 mm. Weight: 28.3 grams. Supplied: battery, Traceable® Certificate, lanyard.

Description	
Fisher Scientific Traceable® Waterproof/Shockproof Stopwatch	06-662-56

Traceable® Dual-Display **Digital Stopwatch**

Precise, Traceable® timing for enzyme tests, viscosity measurements, animal studies, and all timed lab tests. Made for scientists in industrial, educational, hospital, and governmental labs who insist on the finest instrumentation. Engineered for ease of operation, accuracy, and reliability. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).



Quartz-crystal accuracy

Quartz-crystal design is accurate to 0.0005%—over 100 times more accurate than other stopwatches. Functions include single-action, time-out, interval-split, cumulative split, continuous roll-over timing, and countdown alarm timing. Resolution is 0.01 second. Times to 9 hours, 59 minutes, 59 seconds, and 99 hundredths. Dual display shows cumulative and interval split. Features eight recallable memories, plus fastest and slowest lap times. Timer provides repeat function of countdown alarm timing. Set countdown time from 10 hours to 1 second. When zero is reached, timer alarms and repeats countdown from the programmed time. Display count box shows how many times the cycle has been repeated. LCD screen continually displays time remaining to zero.

Rugged, durable, water-resistant

Tough, water-resistant ABS plastic case features tongue-and-groove craftsmanship and O-ring construction to seal out moisture, dust, and fumes. Size: 63 x 76 x 19 mm. Weight: 70 g. Supplied: Traceable® Certificate, lanyard. (battery not included)

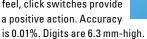
Description	Cat. No.
Fisher Scientific Traceable® Dual-Display Digital Stopwatch	14-648

Traceable® Water-/Shock-**Resistant Stopwatch**



General-purpose stopwatch times to 24 hours. Features include: singleaction, time-out, cumulative-split, and continuous timing. Timing resolution is 1/100 of a second for the first 30 minutes, then continues timing to 23 hours, 59 minutes, 59 seconds, with a 1-second resolution.

As a chronograph, the unit displays time of day in hours, minutes, and seconds, AM/PM, date, and day of the week. Also has a time-of-day alarm. Tactilefeel, click switches provide a positive action. Accuracy





To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: battery, lanyard. Size: 54 x 60 x 12.7 mm. Weight: 28.3 grams.

Description	Cat. No.
Fisher Scientific Traceable® Water-/Shock-Resistant Stopwatch	14-649-11



Dinital

Traceable® Three-Key Stopwatch



The first disposable stopwatch

Three-Key Stopwatch is so inexpensive that it's the first disposable stopwatch. Appropriate for easy-duty, occasional-use needs. Wear it around your neck on the lanyard.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Times to 24 hours with a resolution of 1/100 of a second for 30 minutes and 1 second thereafter. Functions are single-action, time-out, cumulative-split, and continuous roll



over timing. It also displays time and date. Provides a sound confirmation each time a key is pressed. Accuracy: 0.1%. Supplied: Traceable® Certificate, battery, lanyard. Size: 54 mm diameter x 15 mm. Weight: 24 g.

Description	Cat. No.
Fisher Scientific Traceable® Three-Key Stopwatch	14-649-19

Traceable® Digital Bench Top Timer





Traceable® Bench Timer



Times from 0.001 second to 999 hours. Precise timing and an eight-digit, 12.7 mm-high, bright-intensity LED display make it the choice for all industrial and biomedical tests.

Four timing modes

Reads in four different formats: 99 hours, 59 minutes, 59 seconds, 99 hundredths; 9999.999 seconds; 9999.9999 minutes; and 999.9999 hours. Ultra-high stability and sealed quartz-crystal provide precision timing immune to AC line fluctuations. If the power fails, a 9-volt backup battery continues timing until power is restored. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Fulfills ISO 9000 requirements. Reads to 0.001 second and is accurate to 0.001%.

Twelve timing channels

Unit features four timing modes: single-action, time-in/-out, cumulative-split, and interval-split. Up to 12 different events may be timed simultaneously. An audible up-alarm may be set to signal on each channel. The Bench Timer is constructed of high-impact ABS plastic designed for hard laboratory use. Supplied: Traceable® Certificate, battery. For use with 120 VAC. Size: 162 x 120 x 88 millimetres. Weight: 35 g.

Description	Cat. No.
Fisher Scientific Traceable® Bench Timer	06-662-1

The perfect size—unit has a large-screen LCD and a small, lab-bench footprint. Times up from 0.01 second to 9 hours, 59 minutes, 59 seconds, and 99 hundredths of a second. Switchable between cumulative and interval-split, the unit also allows an infinite number of time-outs. Oversize keys make it easy to use. Three 4mm sockets (and supplied test leads) allow external triggering of the start/stop and split/lap/reset functions. Digital display is 19 mm-high and is readable from 6 metres.

Unit features precise, quartz-crystal Traceable® timing for enzyme tests, viscosity measurements, animal studies, and all timed lab tests. Accurate to 0.001% with resolution to 0.01 second. Engineered for ease of operation, accuracy, and reliability.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Portable design permits the unit to be moved easily. Attractive, high-impact ABS plastic case is designed for hard laboratory use. Supplied: battery, Traceable® Certificate, three test leads. Size: 101 x 107 x 44 mm. Weight: 255 g.

Description	Cat. No.
Fisher Scientific Traceable® Digital Bench Top Timer	06-662-40



Traceable® Memory-Card Humidity/ Temperature/Dew Point





Traceable® Memory-Card Humidity/Temperature/Dew Point is a stand-alone unit with data logging capabilities. It records readings from once a minute up to once every 720 minutes on a removable standard SD memory card. Memory card reader (supplied) plugs into any USB computer port for an instant report. Text report includes date/time of day and readings of sensors, report may be sent to any spreadsheet or database. Unit monitors cabinets, incubators, clean rooms, store rooms, labs, hoods, and critical areas. Unit captures 5.9 million readings with the supplied 256 mb removable SD memory card.

Temperature range: 0 to 50.0° C with 0.1° resolution. Temperature accuracy: $\pm 1^{\circ}$ C. Humidity range: 0.0 to 90.0° RH. Resolution: 0.1. Humidity accuracy: $\pm 5^{\circ}$ RH at 25° C from 20 to 85° RH; $\pm 7^{\circ}$ RH elsewhere. Dew point range: -20.0 to 50.0° C with 0.1° resolution. Minimum/maximum feature displays highest/lowest readings for any time period. Alarm features sounds and flashes a bright red LED when temperature, humidity, and/or dew point rise above or fall below user-set trip points, alarm sets in 0.1 increments. Unique 4-line display simultaneously shows ambient temperature, humidity, dew point and time-of-day. Operates using supplied batteries or supplied AC adaptor.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 107 x 88 x 31 mm. Weight: 198 g. Case: high-impact, chemical-resistant ABS plastic. Supplied: 256 mb SD memory card, USB memory card reader, magnetic mounting strips, Velcro®, wall mount, bench stand, batteries, adaptor, and Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Memory-Card Humidity/Temperature/ Dew Point	15-081-112



HUMIDITY CHART

Cat. No.	Page No.	Traceable® Certificate Supplied	Relative Humidity Range	Resolution	Accuracy	Temperature Range	Resolution	Accuracy	Features
15-081-112	61	Yes	0.0 to 90.0%RH	0.1%	±5%RH	0 to 50.0°C	0.1°	±1°C	Removable SD memory card
11-661-8	62	Yes	10.0 to 95.0% RH	0.01% RH	±1.5% RH	0.0 to 50.0°C	0.01°	±0.4°C	Simple point/read technology
14-648-52	62	Yes	25 to 90% RH	1% RH	±2% RH	–20 to 60°C	0.1°	±1°C	Radio-signal from remote
11-661-13	63	Yes	25 to 95% RH	1% RH	±2% RH	0 to 50°C	1°	±1°C	Dual min/max memories
11-661-11	63	Yes	25 to 95% RH	1% RH	±2% RH	0 to 50°C	1°	±1°C	Compact size
11-661-12	63	Yes	25 to 95% RH	1% RH	±2% RH	0 to 50°C	0.1°	±1°C	Sharp display
11-661-14	63	Yes	20 to 95% RH	1% RH	±3.5% RH	0.0 to 50.0°C	0.1°	±1°C	Pen shape
11-661-7D	64	Yes	25 to 90% RH	1% RH	±5% RH	0 to 50°C	0.1°	±1°C	RH/temperature at a glance
06-664-37	64	Yes	0 to 100.0% RH	0.1% RH	±3% RH	−20.0 to 50.0°C	0.1°	±1°C	Dew point, min/max
11-661-20	64	Yes	10.0 to 95.0% RH	0.1% RH	±2.5% RH	−20.0 to 60.0°C	0.1°	±1°C	Recorder output
11-661-7B	65	Yes	5.00 to 95.00% RH	0.01% RH	±1.5% RH	40.0 to 104.4°C	0.01°	±0.4°C	Response time of 10 seconds
11-661-7A	65	Yes	10.00 to 95.00% RH	0.01% RH	±1.5% RH	40.0 to 104.4°C	0.01°	±0.4°C	Also reads dew point
11-661-21	66	Yes	10.0 to 95.0% RH	0.01% RH	±3% RH	0.0 to 50.0°C	0.01°	±1°C	Computer-output
06-664-271	66	Yes	10.0 to 95.0% RH	0.1% RH	±2% RH	−17.7 to 93.3°C	0.1°	±1°C	Computer-output
11-661-17A	67	Yes	10 to 95% RH	0.1% RH	±3% RH	–20 to 60°C	0.1°	±1°C	Hard-copy results
11-661-9	68	Yes	25 to 95% RH	1% RH	±2% RH	−50 to 70°C	0.1°	±1°C	Remote sensor with memory
14-649-84	68	Yes	20 to 99% RH	1% RH	±5% RH	−50.0 to 70.0°C	0.1°	±1°C	Remote humidity sensor
15-077-963	69	Yes	1 to 99% RH	0.1% RH	±4% RH	–40 to 70°C	0.1°	±1°C	Dew point and wet-bulb monitor
14-648-49	69	Yes	0 to 100% RH	10% RH	±5% RH	n/a	n/a	n/a	Humidity card (pack of six)
11-661-6B	69	No	0 to 100% RH	1% RH	±2.5% RH	−40 to 50°C	1°	±1.5°C	No maintenance required

Radio-Signal



Traceable® General-Purpose Hygrometer/Thermometer



Perfect quality-control unit displays accurate answers for every air measurement. Self-contained, the humidity and temperature sensors are built-in. Easy-to-operate unit features a DATA HOLD key allowing readings to be captured and noted.

Traceable to NIST for accuracy

General-purpose unit has a relative humidity range of 10.00 to 95.00% with a resolution of 0.01% and an accuracy of $\pm 1.5\%$ RH. Temperature range is 32 to 122°F or 0 to 50°C with a resolution of 0.01° and an accuracy of ± 0.4 °C at tested points. Response time is 30 seconds to 3.5 minutes. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: battery and Traceable® Certificate. High-impact ABS plastic unit measures 69.8 x 203 x 38 mm. Weight: 226 g.

Description	Cat. No.
Fisher Scientific Traceable® General-Purpose Hygrometer/Thermometer	11-661-8
Data Acquisition System (complete description on page 96)	15-077-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76

Computer Output

28.53

Traceable® Radio-Signal Remote Humidity/Thermometer



Displays humidity and temperature from 30 m away

Traceable® Radio-Signal Remote Humidity Meter/Thermometer receives a radio signal from the remote wireless sensors. It eliminates the cable. Place the main unit at your desk or bench. Place the remote sensor module in labs, ducts, and storage facilities—even outdoors. Remote sensor sends humidity and temperature signals to the main digital display. Transmits on a frequency of 433 MHz. Range is 19 to 30 m depending on the location or number of walls.

Traceable to NIST for accuracy

Relative humidity range is 25 to 90% with a resolution of 1% and an accuracy of $\pm 2\%$ RH mid-range to $\pm 4\%$ RH elsewhere. Switchable thermometer range is -4 to 140° F and -20 to 60° C, with a resolution of 0.1° and an accuracy of $\pm 1^{\circ}$ C. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

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Displays up to three modules

Main unit can receive and display data from up to three different remote sensor modules. Data is transmitted every 30 seconds. Display's trend indicators show if humidity and temperature are rising or falling. Minimum and maximum memory display allows monitoring of conditions over short or long periods, including overnight or weekends. An alarm may be set in increments of 1% RH and 1°. The alarm sounds when the humidity or temperature exceeds the high and low set points. Jumbo digits (35 mm-high) may be read from 7 metres. Case is high-impact, chemical-resistant ABS plastic. Supplied: flip-open stand, wall brackets, Velcro®, one main unit (107 x 114 x 19 mm, weight: 170 g), one remote sensor module (59 x 88 x 19 mm, weight: 85 g), internal humidity sensor, internal temperature sensor, batteries, and Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Radio-Signal Remote Humidity Meter/Thermometer	14-648-52
Additional Fisher Scientific Traceable® Humidity/Thermometer Remote Sensor Module May be set to channel 1, 2, or 3. Total of three modules may be used with main unit.	14-648-53



Traceable® Digital Humidity/Temperature Meter



Digital Relative Humidity/Temperature Meter with Minimum/Maximum Memory

Routine measurements, monitoring round-the-clock, quality-control needs, and critical experimental requirements are features of this humidity/temperature meter. Unique instrument shows the exact air conditions in labs, hoods, clean rooms, coolers, stockrooms, incubators, environmental chambers, and chemical storage areas.

Memories store Min/Max readings

Continuously and simultaneously displays relative humidity and temperature in °F/°C with dual-recall memories. Minimum and maximum memories may be displayed or cleared at any time with the touch of a key. Monitors conditions overnight, on weekends, or for any time period. Temperature range is 32 to 122°F and 0 to 50°C with a resolution of 1° and accuracy of ± 1 °C. Humidity range is 25 to 95%, resolution is 1% RH, and accuracy is ± 2 % RH mid-range to ± 4 % RH elsewhere. Fast-response solid-state sensors show changes in less than 30 seconds. Display is updated once per second.

Fulfills CLIA requirement

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Extra-large, easy-to-view 15 mm-high digits can be read at a glance. Meets federal requirements for CLIA specification 493.1252 for monitoring temperature and humidity.

Self-contained, stable, accurate unit requires no adjustment or maintenance. Case is chemical-and shock-resistant ABS plastic. Supplied: Traceable® Certificate, wall mount, bench stand, switch to read $^{\circ}$ F/ $^{\circ}$ C, sensors, and batteries. Size: $66.6 \times 98 \times 15.8$ mm. Weight: 70 g.

Description	Cat. No.
Fisher Scientific Traceable® Humidity/Temperature Meter with Dual Min/Max Memories	11-661-13
Fisher Scientific Traceable® Digital Humidity Meter	11-661-11
Fisher Scientific Traceable® Digital Humidity/Temperature Meter Features identical to 11-661-13 but without memories. Size: 82 x 177 x 19 mm. Displays temperature to 0.1°.	11-661-12



Traceable® Humidity/Temperature Pen



Humidity/Temperature Pen with memory makes it easy to monitor any location

Pen continuously and simultaneously displays both RH and °F/°C with dual-recall memories. Handy pocket clip makes it easy to carry. Memory displays highest and lowest humidity/ temperature readings achieved overnight or during any time period. Nineteen mm-high LCD can be read at a glance. Meets Federal Government CLIA requirement 493.1252. Pocket pen has fast-response, solid-state sensors which respond in less than 6 seconds. Display is updated every second. Temperature range is 32.0 to 122.0°F (0.0 to 50.0°C) with a resolution of 0.1° and an accuracy of \pm 1°C. Relative humidity display is 20 to 95%. Resolution is 1% and accuracy is \pm 3.5% RH midrange to \pm 5.5% RH elsewhere.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: clip, Traceable® Certificate, and battery. Case is high-impact, chemical-resistant ABS plastic. Size: 139 x 22 x 16.7 mm. Weight: 35 g.

Description	Cat. No.
Fisher Scientific Traceable® Humidity/Temperature Pen	11-661-14



Internal Sensor



Traceable® Humidity/Temperature Meter



Digital display permits instant readings of relative humidity and temperature (°F/°C). It is ideal to monitor conditions in chambers, clean rooms, food processing, scientific labs, and all humidity-sensitive manufacturing operations. Memory captures 99 data points which can be recalled on command. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Humidity range is 10.0 to 95.0% RH and temperature range is -4.0 to 140.0°F (-20.0 to 60.0°C). Resolution is 0.1 for both readings. Accuracy is ± 2.5 % RH mid-range to ± 5 % RH elsewhere. Response time is 30 seconds to 5 minutes. Data HOLD switch freezes the display to capture a reading. Large, bright, 12.7 mmhigh, four-digit liquid crystal display can be read from 3 metres away. Rugged handheld unit is completely portable and designed for years of dependable and reliable service.

Instantly updates readings

Battery powers the unit for 1 year of intermittent use or 100 hours of continuous readings. Precision thin-film capacitance sensor updates the display three times per second. Supplied complete with Traceable® Certificate, battery, tripod mounting hole, and hard carrying case. Size: 63 x 112.7 x 25.4 mm. Weight: 198 g.

Description	Cat. No.
isher Scientific Traceable® Humidity/Temperature Meter	11-661-20

Traceable® Pocket Hygrometer/Dew Point/Thermometer



Ignores condensation

Compact design features an electronic capacitance polymer film sensor not affected by condensation. Unit may be used in 100% humidity. Relative humidity range is 0 to 100.0% with a resolution of 0.1% and an accuracy of $\pm 3\%$ RH mid-range to $\pm 4\%$ RH elsewhere. Both dew point and temperature ranges are -20.0 to 50.0° C and -4.0 to 122° F with a resolution of 0.1° and an accuracy of $\pm 1^{\circ}$ C. Full range response is 30 to 60 seconds.

Traceable to NIST

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). At the press of a key, unit recalls minimum/maximum readings. HOLD key freezes the display to record a reading. Dual display shows relative humidity with either dew point or temperature on a 19 mm-high LCD. Size: 165 x 50 x 16 mm. Weight: 85 g. Supplied: Traceable® Certificate and batteries.

Description	Cat. No.
Fisher Scientific Traceable® Pocket Dew Point/Hygrometer/Thermometer	06-664-37



Traceable® Hygrometer/Thermometer



RH/Temperature at a glance

Traceable® Hygrometer/Thermometer provides readings instantly. It is ideal for constantly monitoring labs, fume hoods, walk-ins, plant areas, and storage facilities. Large, easy-to-read 12.7 mm-high LCD digits can be read from 4.5 metres. Unit reads 25 to 90% relative humidity and temperature from 32 to 122°F and 0 to 50°C. Resolution is 1% RH and 0.1°. Accuracy is $\pm 5\%$ RH (40 to 80% RH) otherwise $\pm 7\%$ RH. Temperature accuracy is $\pm 1\%$ (0 to 40°C) otherwise 2°C. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Bench stand and wall mount

Self-contained, stable, and accurate unit requires no adjustment or maintenance. Supplied: wall-mount screw, bench stand, Traceable $^{\circ}$ Certificate, battery. Size: 88 x 127 x 22 mm. Weight: 170 g.

Description	Cat. No.
Fisher Scientific Traceable® Hygrometer/Thermometer	11-661-7D



Traceable® Humidity/Temperature/Dew Point Meter



Traceable unit displays humidity to 0.01%, use for QC, ISO 9000, and R/D

Traceable® Digital Hygrometer/Thermometer/Dew Point instrument, by using a special breed of artificial intelligence, provides a response time of under 10 seconds with a resolution of 0.01% RH, 0.01°F/°C, and 0.01 dew point/frost point °F/°C. It samples once per second. Fuzzy logic algorithm pinpoints the exact answer almost instantly.

Fast response with high accuracy

Direct-reading instrument has an accuracy of $\pm 1.5\%$ RH, 0.01 RH resolution and reads from 5 to 95% RH. Results are reported in both °F and °C from -40.00 to 220.0°F (-40.00 to 104.0°C) temperature, and from -40.00 to 140.0°F (-40.00 to 60.00°C) dew point/frost point. Temperature resolution is 0.01° with an accuracy of ± 0.4 °C.

Certified Traceable to NIST

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Clean room and food applications

Fulfills federal CLIA requirements and is ideal for hoods, clean rooms, food storage, process control, incubators, desiccators, drug manufacturing, environmental chambers, corrosion analysis, and inside/outside air monitoring. Four-digit LCD can be read from 3 metres. Rugged handheld unit is designed for years of service.

Hi/Lo memories, programmable alarms, and data output

Memory recalls both minimum and maximum readings in dew point/frost point, temperature, and humidity at any time. High and low alarms can be programmed in dew point/frost point, temperature, and humidity. When an out-of-range condition is sensed, an alarm sounds and the display flashes. Computer output permits data to be captured, transferred, stored, and printed. Size: 139 x 88 x 31 mm. Weight: 340 g. Probe length is 177 mm. Cable length is 1.8 m. Supplied: probe, battery, computer output, Traceable® Certificate, and ABS plastic carrying case. AC adaptor (not supplied) is available.



Wireless Capable

(see page 95)

Computer Output

Description	Cat. No.
Fisher Scientific Traceable® Humidity/Temperature/Dew Point Meter Fast response model. Range: 5.00 to 95.00% RH, with response time of 10 seconds, and probe diameter of 10 mm.	11-661-7B
Fisher Scientific Traceable® Humidity/Temperature/Dew Point Meter Universal model. Range: 10.00 to 95.00% RH, with response time of 30 seconds to 3.5 minutes and probe diameter of 10 mm.	11-661-7A
Data Acquisition System (complete description on page 96)	15-077-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76

Traceable® Humidity/Thermometer



Hygrometer/Dew Point/Thermometer with data logger and computer output

Unit simultaneously displays humidity or dew point and temperature. One of the newest and fastest humidity sensors ever developed displays full-range humidity changes in 5-30 seconds. It records wide humidity variations on a second-to-second basis. Monitor labs, clean rooms, food processing, and all humidity-sensitive manufacturing areas with this high-resolution unit. Relative humidity resolution is 0.01%, accuracy is $\pm 3\%$ RH, and range is 10.00 to 95.00% RH. Dew Point is a calculated measurement, resolution is 0.01°, accuracy is sum of humidity and temperature. Range is -13.50 to 120.1° F and -25.30 to 48.90° C. Temperature resolution is 0.01° , accuracy is $\pm 1^{\circ}$ C, and range is 32.00 to 122.0° F and 0.00 to 50.00° C.

Memories, data logger, computer output

Memory recalls minimum/maximum readings. HOLD key freezes display for reading later. Data logger captures 1000 readings manually at the push of a key or automatically when set between 1 to 3600 seconds. Computer output allows unit to be connected to a computer for down loading data logger results or constant monitoring. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Jumbo-size display is 35 mm-high. Case is impact-resistant ABS plastic. Supplied: probe (16-mm diameter x 203 mm), 1 m cable, battery, and Traceable® Certificate. Size: 177 x 69.8 x 28.5 mm. Weight: 269 g.

Description	Cat. No.
Fisher Scientific Traceable® Humidity/Thermometer	11-661-21
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 95)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76





Computer Output
Wireless Capable
(see page 95)

Traceable® Memory Hygrometer/Thermometer



Maintains accuracy with do-it-yourself calibration

Traceable® Memory Hygrometer/Thermometer measures from 10.0 to 95.0% relative humidity and temperature from 0.0 to 199.9°F and -18.0 to 93.0°C. Simultaneously displays both temperature and relative humidity on its dual 28.5 mm high LCD. Precision thermistor offers a temperature accuracy of ± 1 °C between 0 to 40°C, otherwise ± 2 °C, and a resolution of 0.1°. An audible click confirms each key entry.

Microprocessor-based design provides unparalleled accuracy

Resistive polymer film sensor provides humidity readings with an accuracy of $\pm 2\%$ mid-range to $\pm 4\%$ elsewhere. Humidity resolution is 0.1% relative humidity. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). At the touch of a key, recalls the Min/Max humidity and temperature readings captured during any time period. A special HOLD key permits freezing the display to capture readings.

Computer output

Unit is equipped with an output receptacle for transferring data to a computer. ABS plastic case is both lightweight (119 g) and rugged for extreme field or lab use. Supplied: probe/cable, Traceable® Certificate, hard plastic carrying case, battery. Size: 180 x 69.8 x 31 mm. Probe: 215 mm x 16 mm diameter with a 1 m cable.

Description	Cat. No.
Fisher Scientific Traceable® Memory Hygrometer/Thermometer	06-664-271
33% Calibration Standard with calibration instructions	06-664-272
75% Calibration Standard with calibration instructions	06-664-273
Data Acquisition System (complete description on page 96)	15-077-73
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76





Computer
Wireless Capable (see page 95)



Traceable® Printing Hygrometer/Thermometer



Printing Hygrometer/Thermometer provides permanent hard-copy results

Provides a permanent record by printing current humidity/temperature/time/date and maximum/minimum readings, plus the time/date they occurred. Triple display with 9.6 mm-high LCD digits continuously and simultaneously shows humidity, temperature 1, and temperature 2. Perfect dependable and reliable unit to monitor relative humidity and temperature in the lab, plant, and field. Meets federal requirements for CLIA specification 93.1207. Printer provides hard copy for today's stringent ΩC documentation.

Use anywhere

Ideal for use in hoods, clean rooms, food storage areas, drug manufacturing, all air analysis, and environmental chambers. Automatically prints the current humidity/temperature 1, temperature 2, dewpoint, date, and time of day at any programmed interval or at the press of a key. The printer may be programmed to automatically and repeatedly print in any increment from 6 seconds to 59 minutes, 59 seconds.

Fast-response, solid-state sensors detect changes in less than 10 seconds. Relative humidity range is 10 to 95% with a resolution is 0.1% and an accuracy of $\pm 3\%$ RH mid-range to $\pm 5\%$ RH elsewhere. T1 temperature range is from -20 to 60° C (-4 to 140° F), resolution of 0.1° , accuracy $\pm 1^{\circ}$ C ($\pm 1.8^{\circ}$ F). T2 Type-K thermocouple temperature range is from -200 to 1333° C (-328 to 2431° F), accuracy $\pm (0.2\%$ of the reading plus 1.8° C), resolution of 0.1° C (from -200 to 999.9° C) and 0.1° F (from -328 to 999.9° F) otherwise 1° . To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: Humidity/T1 temperature probe, T2 Type-K probe, paper, probe holder/stand, carrying case, batteries. Accessory adaptor for continuous AC operation is available. Humidity/T1 probe is 19 mm diameter x 158 mm, 1.2 m cable, T2 probe is 1.5 mm-diameter, 1.2 m cable. Size: $190 \times 76 \times 38$ mm. Weight: 283 g.

Description	Cat. No.
Fisher Scientific Traceable® Printing Hygrometer/Thermometer	11-661-17Δ



Traceable® Jumbo Humidity/Temperature Meter



Ambient and probe temperatures

Unit continuously and simultaneously displays ambient relative humidity and (internal probe and external probe) temperatures in °F or °C, with dual-recall memories. External thermometer probe is supplied with a 3 metre cable. Both sensor and cable perform accurately when under water.

Quick-response sensor

External probe range is -58 to $158^\circ F$ and -50 to $70^\circ C$. Ambient internal probe range is 32 to $122^\circ F$ and 0 to $50^\circ C$. Resolution is 1° and accuracy is $\pm 1^\circ C$. Humidity range is 25 to 95%, resolution is 1% RH, and accuracy is $\pm 2\%$ RH mid-range to $\pm 4\%$ RH elsewhere. Fast-response, solid-state sensors show changes in less than 30 seconds. Display is updated once per second. Minimum and maximum memories may be displayed or cleared at any time with the touch of a key. They permit monitoring conditions overnight, on weekends, or for any time period. Jumbo 28.5 mm display may be read from as far away as 10 m.

Fulfills CLIA requirements

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Meets federal requirements for CLIA specification 493.1207 for monitoring temperature and humidity. Self-contained, stable, accurate unit requires no adjustment or maintenance. Case is chemical- and shock-resistant ABS plastic. Supplied: flip-open stand, wall mount, batteries. Size: 107 x 101 x 19 mm. Weight: 152 q.

Description	Cat. No.
Fisher Scientific Traceable® Jumbo Humidity/Temperature Meter	11-661-19









Traceable® Memory Humidity/Temperature Meter

Memory Humidity/Temperature Monitor with temperature probe

Memory unit constantly monitors and remembers high and low readings. Probe and cable may be placed under water.

Remembers Min/Max readings

Display simultaneously shows probe temperature, ambient temperature, and ambient humidity. Minimum and maximum memory readings may be recalled or cleared with the touch of a key. Humidity range is 25 to 95% RH with a resolution of 1% and an accuracy of ±2% RH mid-range to ±4% RH elsewhere. Ambient temperature range is 32 to 122°F and 0 to 50°C with a resolution of 1°. External temperature sensor displays from -58.0 to 158.0°F and -50.0 to 70.0°C with a resolution of 0.1°. Temperature accuracy is ±1°C. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Displays ambient and probe temperatures

Use it to record standard lab conditions every day. Memory unit is ideal to constantly monitor an area or dedicate to one test. Bright LCD digits are 12.7 mm-high. Handsome design is housed in a rugged ABS plastic case. Supplied: stand, wall mount, internal humidity sensor, external/internal temperature sensors, 3 metre cable, Traceable® Certificate, and batteries. Size: 152 x 95 x 19 mm. Weight: 170 g.

Description	Cat. No.
Fisher Scientific Traceable® Memory Humidity/Temperature Meter	11-661-9



Traceable® Remote Alarm RH/Temperature Monitor



Unique instrument features a remote temperature/humidity sensor with a 2 m cable. It is ideal for routine measurements, monitoring round-the-clock, all quality-control needs, and critical experimental requirements. Place the sensor in hoods, clean rooms, coolers, stockrooms, incubators, environmental chambers, desiccators, and chemical storage areas. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Minimum and maximum memory

Triple display simultaneously shows minimum/maximum and current humidity, or minimum/maximum and current temperature. Minimum and maximum memory feature for both temperature and humidity permits monitoring conditions overnight, on weekends, or any time period. Humidity range is 20 to 99% with a resolution of 1%. Accuracy is $\pm 5\%$ RH midrange. Temperature range: -58.0 to 158.0°F and -50.0 to 70.0°C. Resolution: 0.1°. Accuracy: ± 1 °C.

High and low alarm

Alarm may be set in 1% RH and 1° increments. Alarm sounds when reading rises above or falls below set points. Supplied: flip-open stand, slot for wall mounting, external humidity/temperature sensor, battery, and Traceable® Certificate. Easy-view, 12.7 mm-high digits may be read from 3 metres. Case is high-impact, chemical-resistant ABS plastic. Size: 107 x 69.8 x 19 mm. Weight: 113 g.

Description	Cat. No.
Fisher Scientific Traceable® Remote RH/Temperature Monitor with Alarm	14-649-84





Traceable® Dew Point/Wet-Bulb/Humidity/ **Thermometer Signaller**



Traceable® unit shows current, minimum, and maximum displays and includes a settable high/low alarm for all four readings (dew point, wet-bulb, humidity, temperature). Alarm may be set in 0.1 increments. It sounds for one minute and red LED flashes until readings return to non-alarm condition. Range is 1 to 99% relative humidity with a resolution of 0.1% and an accuracy of $\pm4\%$ between 20 to 80% RH. Temperature range: -40 to 70°C and -40 to 158°F. Resolution: 0.1° (below 100) and an accuracy of ±1°C.

Traceable to NIST

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Meets federal requirements for CLIA specification 493.1207 for monitoring temperature and humidity. LCD digits are 25.4 mm-high. Supplied: batteries and Traceable® Certificate. High-impact, chemical-resistant ABS plastic case, with plastic built-in stand and wall mount. Size: 104 x 104 x 25.4 mm. Weight: 120 g.

Description	Cat. No.
Fisher Scientific Traceable® Dew Point/Wet-Bulb/Humidity/Thermometer Signaller	15-077-963

Traceable® Humidity-On-A-Card™



Unique humidity card indicates both the current humidity and the maximum humidity attained. Easy-to-read cards are ideal for use with bottles, chemicals, plastic bags, electronics, desiccators, and storage containers. Easily monitor humidity levels in shipments, optics, and packaging.

Watch colours change as humidity rises/falls

Dual ranges are Current and Maximum. Current range is 0 to 100% relative humidity. Colour changes from blue to layender in increments of 10% RH. Reversible indicator changes colour as the humidity increases and decreases. Readable to an accuracy of ±5% RH at 75°F (24°C).

View maximum RH% reached

Maximum relative humidity attained is indicated by the highest numbered hole containing dissolved crystals. Dissolved crystals will cause the paper around the hole to turn blue. Once dissolved, the reading will not change. (NOTE: for crystals to dissolve properly, the humidity must be maintained at or above the indicated value for a minimum of 24 hours). Each card is individually sealed in a clear moisture-barrier bag with a Humidity Sponge™ desiccant to keep the card dry and provide for an extended shelf life. To assure accuracy an individually serialnumbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Card size is 101 x 101 mm.

Description	Cat. No.	
Figher Scientific Transchle® Humidity On A Cord™ (Pook of six cords)	1/1 6/10 //0	

Fisher Scientific Traceable® Humidity-On-A-Card™ (Pack of six cards)

Dial Hygrometer/Thermometer

Dial provides humidity and temperature readings in an easy-to-read format. Ideal for constantly monitoring labs, fume hoods, walk-ins, plant areas, and storage facilities. Large, analog readout displays 0 to 100%RH, 1%RH resolution, and accuracy: ±2.5% RH at 50% RH. Dial also displays temperatures from -40 to 122°F (-40 to 50°C), 1° resolution, and accuracy: ±1.5°C.

No maintenance required

Self-contained, stable, accurate unit requires no adjustment, maintenance, or battery. Supplied: wall mount screw. Size: 152 mm diameter x 25.4 mm. Weight: 226 g.

Description	Cat. No.
Fisher Scientific Dial Hygrometer/Thermometer	11-661-6B





Traceable® Anemometer Pens with Temperature, Humidity, **Dew Point, and Barometric Pressure**





Three units provide for airflow/temperature; airflow/temperature/humidity/dew point; and airflow/temperature/humidity/dew point/barometric pressure.

Easy to use rugged design

Simple operation eliminates the need to refer to instructions. Designed for intuitive, easy operation by everyone. Tough ABS plastic case with 0-ring seal and membrane keypad keep out dust and dirt, assuring a long life in severe lab or harsh plant environments. HOLD key freezes the reading on the display. High contrast 9.6 mm-high LCD digits are easy to read. At the press of a key, unit recalls minimum/ maximum readings.

Traceable to NIST

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Rugged ABS plastic case is 38 mm diameter x 209 mm; Weight: 170 g. Supplied: key-chain carabiner, Traceable® Certificate, and four batteries.



Cat. No.	15-078-194	15-078-195	15-078-196
Description	Fisher Scientific Traceable® Anemometer/Thermometer	Fisher Scientific Traceable® Anemometer/Thermometer/ Hygrometer/Dew Point	Fisher Scientific Traceable® Anemometer/Thermometer/ Hygrometer/Dew Point/Barometer
Air Flow Range	0.4 to 30.0 m/s 1.4 to 108.0 km/hr 80 to 5910 ft/min 0.9 to 67.0 mile/hr 0.8 to 58.3 knots	0.4 to 30.0 m/s 1.4 to 108.0 km/hr 80 to 5910 ft/min 0.9 to 67.0 mile/hr 0.8 to 58.3 knots	0.4 to 30.0 m/s 1.4 to 108.0 km/hr 80 to 5910 ft/min 0.9 to 67.0 mile/hr 0.8 to 58.3 knots
Air Flow Resolution	0.1 m/s; 0.1 km/hr; 1 ft/min; 0.1 mile/hr; 0.1 knots	0.1 m/s, 0.1 km/hr; 1 ft/min; 0.1 mile/hr; 0.1 knots	0.1 m/s; 0.1 km/hr; 1 ft/min; 0.1 mile/hr; 0.1 knots
Air Flow Accuracy	±3% full scale under 20 m/s ±4% full scale over 20 m/s	±3% full scale under 20 m/s ±4% full scale over 20 m/s	±3% full scale under 20 m/s ±4% full scale over 20 m/s
Temperature Range	32.0 to 122.0°F (0.0 to 50.0°C)	32.0 to 122.0°F (0.0 to 50.0°C)	32.0 to 122.0°F (0.0 to 50.0°C)
Temp. Resolution	0.1°	0.1°	0.1°
Temp. Accuracy	±0.8°C	±0.8°C	±0.8°C
Humidity Range		10.0 to 95.0% RH	10.0 to 95.0% RH
Hum. Resolution		0.1%	0.1%
Hum. Accuracy		±3 of reading + 1	±3 of reading + 1
Dew Point Range		-13.5 to 120.1°F (-25.3 to 48.9°C)	-13.5 to 120.1°F (-25.3 to 48.9°C)
D.P. Resolution		0.1°	0.1°
Barometric Pressure Range			10.0 to 1100 hPa 7.5 to 825.0 mmHg 0.29 to 32.48 inHg
Barometric Pressure Resolution			0.1 and 1 hPa 0.1 mmHg 0.01 inHg
Barometric Pressure Accuracy			±4 hPa











Ultra compact micro-design is small in size and big in features

Unit measures air velocity in five user selectable values: meters per minute, feet per second, miles per hour, kilometers per hour, and knots. It also displays: maximum airflow measured, temperature in °F and °C. Measurements are lightning fast with reading updates 2 times per second.

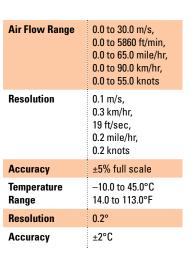
Easy to use rugged design

Simple one-key operation eliminates the need to refer to directions. Tough ABS plastic case and water-resistant design keeps out moisture, dust, and dirt, assuring a long life in severe lab, harsh plant or outdoor environments. High contrast LCD digits are over 8.3 mm-high and easy to read. Electro-luminescent backlight allows the display to be read in total darkness.

Traceable to NIST

To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). Rugged ABS plastic case is 57 x 101 x 19 mm; Weight: 56 g. Supplied: Traceable® Certificate, lanyard. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® Micro-Anemometer/Thermometer	15-078-197





Enviro-Meter™

Handheld Enviro-Meter™ provides an anemometer, humidity meter, light meter, and two thermometers all in one unit. Lightweight and compact case permits one-handed operation. Features a hold key that captures a reading for ease in recording a result. Min/Max key displays highest and lowest reading over any time period. Anemometer displays air velocity ranges: 80 to 5910 feet per minute (resolution 1), 0.4 to 30.0 meters per second (resolution 0.1), 1.4 to 108.0 kilometers per hour (resolution 0.1), 0.9 to 67.0 miles per hour (resolution 0.1), and 0.8 to 58.3 knots (resolution 0.1). Accuracy is: under 20 meters per second ±3% of full scale readings and over 20 meters per second ±4% full scale reading.

Relative humidity range is 10.0 to 95.0% (resolution 0.1% RH). Accuracy is: under $70\% \pm 4\%$ RH and over $70\% \pm (4\%$ of the reading plus 1.2% RH). Light ranges are 0 to 20,000 lux (resolution 1) and 0 to 2000 foot candles (resolution 1). Accuracy is $\pm 5\%$ of the reading and ± 8 digits.

Internal ambient thermometer sensor range is 32.0 to $122^{\circ}F$ and 0.0 to $50.0^{\circ}C$ (resolution 0.1°). Accuracy is $\pm 1.2^{\circ}C$. External thermometer range is -148.0 to $2372^{\circ}F$ and -100.0 to $1300^{\circ}C$ (resolution 0.1°). Accuracy is $\pm (1\%$ of the reading plus $1^{\circ}C$). Comes ready to use with fast-response, Type-K beaded external thermometer probe with cable length of 1 metre, wrist strap, and battery. Size: $165 \times 57 \times 31$ mm. Weight: 170 g.

Description	Cat. No.
Fisher Scientific Enviro-Meter™	02-401-5

Digital

Traceable® Anemometer/Thermometer



One-hand operation anemometer displays air velocity and temperature simultaneously. Ease of operation in hoods or outdoors makes this an ideal instrument. Unit is engineered for years of reliable service even in severe lab, harsh plant, or outdoor environments.

Ranges are: 0.40 to 30.00 meters per second with a resolution of 0.01 meter, 1.4 to 108.0 kilometers per hour with a resolution of 0.1 kilometre, 80 to 5900 feet per minute with a resolution of 1 foot, 0.9 to 67.0 miles per hour with a resolution of 0.1 mile, 0.8 to 58.0 knots (nautical miles per hour) with a resolution of 0.1 knot, and -10.0 to 50.0° C and 14.0 to 122° F with a resolution of 0.1 degree. Anemometer accuracy is $\pm 3^{\circ}$ 6 of full scale and thermometer accuracy is $\pm 1^{\circ}$ C. To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology).

Reading is updated instantaneously. A memory key allows the unit to recall the highest and lowest readings achieved. A HOLD key freezes the display at the current reading, ideal for capturing a reading in a difficult location. An AVERAGE key allows from 2 to 8 readings to be averaged automatically. Rugged case is chemical-shock-resistant ABS plastic. Extra-large LCD digits are 12.7 mm-high and can be read from 3 metres. Supplied: Trace-able® Certificate, battery, hard plastic carrying case, and instructions. Size: 184 x 76 x 44 mm. Weight: 209 g.

Description	Cat. No.
Fisher Scientific Traceable® Anemometer/Thermometer	06-664-28
Data Acquisition System (complete description on page 96)	15-077-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76







Computer Output

Traceable® Digital Anemometer/Thermometer



Traceable® Anemometer measures air velocity/temperature in hoods and outside environments with ease and accuracy. Use it to display even slight gas movement in ducts. Designed for heavy use in lab, plant, and field, it is built to take a beating and still give years of reliable readings.

Ranges are: 0.4 to 30.0 meters per second with a resolution of 0.1 m, 1.4 to 108.0 kilometers per hour with a resolution of 0.1 km, 80 to 5910 feet per minute with a resolution of 10 ft, and 0.8 to 53.3 knots (nautical miles per hour) with a resolution of 0.1 knots, and 0.0 to 60.0 °C and 32.0 to 140.0 °F with a resolution of 0.1 °. Anemometer accuracy is $\pm (2\% + 1 - \text{digit})$. Temperature accuracy is $\pm 1^{\circ}\text{C}$.

Traceable to NIST

The extraordinary low-friction, precision, ball bearing design provides a vane which rotates freely in both low and high velocities. To assure accuracy a serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). A HOLD switch freezes the display at the current reading. Ideal for capturing a reading in a difficult location. Engineered for years of reliable service even in severe lab or harsh plant environments. Rugged case is chemical-/shock-resistant ABS plastic and has a handy built-in, flip-open bench stand for easy monitoring. LCD is 19 mm-high and can be read from 4.5 m. Supplied: battery, hard plastic carrying case, and Traceable® Certificate. Handle: 63 mm long. Wind vane: 69.8 mm diameter, and 1.2 m cable. Size: 158 x 76 x 31 mm. Weight: 0.45 kg.

Description	Cat. No.
Fisher Scientific Traceable® Digital Anemometer with Thermometer	01-241





Traceable® Hot Wire Anemometer/Thermometer



Hot Wire Anemometer with two miniature glass-bead thermistors provides greater precision at low air velocities. Telescope probe expands from 241 mm to 1 metre for use in hard-to-reach places. No moving-parts eliminate friction errors caused by rotating vanes. It's ideal for clean rooms and environmental tests.

Displays air speed in five ranges

Features five measuring ranges in air velocity: 0.2 to 20.0 meters per second (resolution 0.1), 0.7 to 72.0 kilometers per hour (resolution 0.1), 40 to 3940 feet per minute (resolution 1), 0.5 to 44.7 miles per hour (resolution 0.1), and 0.4 to 38.8 knots (nautical miles per hour) (resolution 0.1). Accuracy is \pm (1% full scale plus 1 digit). Unit also displays temperature in °F and °C from 32.0 to 122.0°F and 0.0 to 50.0°C with a resolution of 0.1°. Accuracy is \pm 0.8°C (1.5°F).

Downloads data to computer or data logger

Computer output allows anemometer to be connected to a computer or data logger for monitoring results. Memory function recalls the highest and lowest readings. A Data HOLD key freezes the display to capture readings. Displays simultaneously shows air speed and temperature. To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: dual thermistors probe, 1 m cable, Traceable® Certificate, batteries, and computer output. Size: 177 x 76 x 31 mm. Weight: 269 g.

Description	Cat. No.
Fisher Scientific Traceable® Hot Wire Anemometer/Thermometer	06-662-73
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 96)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76







Computer Output



Traceable® Digital Hygrometer/Thermometer/Barometer/Dew Point Pen





Measures temperature, humidity, barometric pressure, and dew point

Relative humidity range is 10.0 to 95.0% with a resolution of 0.1% and an accuracy of ± 3 % RH mid-range to ± 4 % RH elsewhere. Temperature range is 32.0 to 122.0°F and 0.0 to 50.0°C with a resolution of 0.1° and an accuracy of ± 1 °C. Dew point range is 13.5 to 120.1°F and -25.3 to 48.9°C with a resolution of 0.1°.

Barometer measures pressure in 3 different units: Inches of mercury (inHg) from 0.29 to 32.48 with a resolution of 0.01, millibars (hPa) from 10.0 to 1100 with a resolution of 0.1 and 1 hPa, and millimeters of mercury (mmHg) from 7.5 to 825.0 with a resolution of 0.1 mmHg. Accuracy is ± 4 hPa. User selectable dual display shows humidity/temperature, humidity/dew point, barometer/temperature, or barometer/humidity.

Lightweight and compact

Compact design features an electronic capacitance polymer film sensor not affected by condensation. Tough ABS plastic case and water-resistant design with 0-ring seal and membrane keypad assure a long life in severe lab or harsh plant environments. HOLD key freezes the reading on the display. High contrast 9.6 mm-high LCD digits are easy to read. At the press of a key, unit recalls minimum/maximum readings.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 38 mm dia. x 203 mm. Weight: 141 grams. Supplied: key-chain carabiner, Traceable® Certificate, and batteries.

Description	Cat. No.
Fisher Scientific Traceable® Digital Hygrometer/Thermometer/Barometer/Dew Point Meter Pen	15-078-198



Traceable® Handheld Barometer



Barometer, altimeter, thermometer, stopwatch, compass, and time-of-day clock—all in the palm of your hand!

Handheld Digital Barometer measures altitude, temperature, and barometric pressure. Also has a stop-watch/time-of-day clock, compass and graphically displays the barometric pressure trend. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Measures barometric pressure from 8.85 to 32.45 inches of mercury (inHg) with a resolution of 0.01 inHg and from 300 to 1100 millibars (mbar) with a resolution of 1 mbar. Accuracy is ±8 mbar at tested points. Barometric pressure trend shows current reading and previous 2, 4, 6, 8, 10, and 12 hours in bar-chart format. Barometric pressure reading is updated every 15 minutes.

Altimeter

Measures altitude from -700 to 9000 meters (-2296 to 29520 feet) with a resolution of 0.1 from -500 to 999.9, 1 otherwise. Altitude is displayed in meters or feet. Reading is updated every 2 seconds. Features a minimum/maximum memory. Altitude trend shows present reading and previous 12 hours. May also be manually adjusted to a known altitude.

Thermometer, stopwatch/timer, clock, and compass

Thermometer displays from -10 to 60° C/14 to 140° F; resolution is 0.1°. Accuracy is $\pm 1.5^{\circ}$ C. Temperature display is updated every minute. Stopwatch times events from 1 second to 23 hrs, 59 min, 59 sec. Alarm timer counts down from 23 hrs, 59 mins, 59 secs to 1 second. Resolution is 1 second. Clock displays time of day, date, month, and day of week. Clock also features 12/24 hour format and alarm. Compass feature displays real time direction in whole circle bearing, or compass bearing. Rugged shock-resistant case, compact size $95 \times 69.8 \times 19$ mm, and light weight 99 g make this the perfect portable unit. Supplied: lanyard, Traceable® Certificate. (battery not included)

Description	Cat. No.
Fisher Scientific Traceable® Hand Held Barometer	02-406



Traceable® Workstation Digital Barometer



Innovative barometer stands on the bench

Workstation digital barometer measures atmospheric pressure, graphically displays the barometric trend, and reports temperature and time. Ideal for recording ambient changes in the lab, monitoring conditions affecting sample analysis, and assisting in the prediction of weather changes.

Barometer measures pressure from 23.62 to 31.01 inches of mercury (inHg) with a resolution of 0.03 inHg, and from 800 to 1050 millibars (mbar) with a resolution of 1 mbar. Accuracy is ± 0.4 inHg (± 12 mbars between 900 to 1050 mbar). Graphic barometric trend shows present reading and previous 1, 3, 6, and 12-hour readings in a bar chart format. Adjustable altitude compensation is from -300 to 1200 meters and -900 to 3600 feet.

Temperature range is 15 to 158°F and -9.5 to 70° C with a resolution 0.5° and an accuracy of $\pm 1^{\circ}$ C between 0 and 50° C. Clock shows time in AM/PM and 24-hour formats. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Accurate forecasting indicators show weather conditions for the next 12-hours using symbols for sunny, cloudy, rainy, and partly cloudy. Supplied: Traceable® Certificate and batteries. Size: $101 \times 101 \times 57$ mm. Weight: 113 g.

Description	Cat. No.
Fisher Scientific Traceable® Workstation Digital Barometer	15-077-962







Traceable® Precision Dial Barometer



Traceable® Precision Barometer's triple scales provide a sensitive measure of atmospheric pressure from 954 to 1073 millibars, 28.1 to 31.7 inches of mercury, and 715 to 805 millimeters of mercury with a resolution of 0.5 mbar, 0.05 lnHg, and 0.5 mmHg. Accuracy is $\pm 0.5\%$ of reading.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Case is rugged corrosion-proof, nickel-chrome. Adjustable pointer may be set to indicate changes. Complete with altitude adjustment screw (use at locations as high as 1000 meters), desk stand, and wall mount. Size: 104 mm diameter x 38 mm. Weight: 0.45 kg.

Description	Cat. No.
Fisher Scientific Traceable® Precision Dial Barometer	14-648-51



Wireless Weather System

Weather System is a complete professional weather station. Perfect for industrial plants, labs, schools, and others needing to monitor conditions, forecast weather, and check environmental air parameters. Minimum/maximum readings may be displayed for all measurements.

Displays temperature, humidity, dew point, heat index, barometric pressure/pressure bar graph, weather forecast, wind direction/speed, wind-chill, rainfall amount, and atomic clock/calendar/moon phase. Programmable alarms for all measurements signal out-of-range conditions. Minimum/maximum readings may be displayed for all measurements.

Data logger holds up to 291 days of data. Data output permits linking to a computer for storing all information, making a permanent weather database, generating analysis, and studying trends. The main unit receives a radio signal from the remote wireless sensors. System eliminates all cables. Place the main unit anywhere. Size: $190 \times 146 \times 38$ mm, display is 152×88 mm. Supplied: all equipment, all sensors, AC adaptor, and 4 backup batteries (eliminates concerns about power outages).

Description	Cat. No.
Fisher Scientific Wireless Weather System	02-402

Traceable® Manometer/Pressure/Vacuum Gauges

Manometer displays gauge and differential pressure/vacuum in eleven different units. Response time is 0.5 second. Hose fittings on the unit permit using hose/tubing with inside diameters from to 1.5 to 4.7 mm. Large 15 mm-high digits are visible from 1.8 metres.

At the touch of a key unit may be zeroed or any pressure may set to zero. Differential feature permits reading the difference of the pressure or vacuum between two sources. Memory feature recalls highest and lowest reading over any time period. A count-up timer displays up to 99 hours, 59 minutes, 59 seconds. A DATA HOLD key freezes the display to capture readings. Brilliant backlighting permits reading even in dark areas. Computer output permits all units to be connected to a computer for monitoring and storing unlimited results. Accuracy is ±0.3% of full scale between 0 to 50°C. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Printing model

Data logging feature permits automatically capturing and storing up to 12,000 readings, including date and time, at intervals as short 1 second or as long as 2 hours. Printing model allows the user to manually capture and store up to 99 readings, including date and time at the press of a key. Printer provides a hard copy for today's stringent quality-control documentation. Printer model prints samples number, current reading, date, and time. Printer allows both manual memories and data logger memories to be printed without the need for a computer. Computer output allows manual memories, data logger memories, and current programmable capturing to be streamed to a pc computer. Printing/data logging model supplied: hose/tubing, batteries, ABS plastic carrying case, computer output, 2 metre computer cable, software CD, Traceable® Certificate, and paper roll. Size: 69.8 x 203 x 44 mm. Weight: 340 g.

Non-printing model

Non-printing model supplied: hose/tubing, battery, computer output, Traceable® Certificate, and ABS plastic carrying case. Computer output allows current programmable capturing to be streamed to a pc computer (computer cable and software sold separately). Size: 69.8 x 180 x 28.5 mm. Weight: 141 grams.

Cat. No. (Non-Printing)	06-664-18	06-664-19	06-664-21	06-664-22
Cat. No. (Printing/Datalogging)	15-078-190			15-078-193
Maximum Allowed PSI	20	30	60	150
PSI Range	-5.000 to 5.000	-15.00 to 15.00	-30.00 to 30.00	-100.0 to 100.0
PSI Resolution	0.003	0.01	0.02	0.1
mbar Range	-345.0 to 345.0	-1034 to 1034	-2068 to 2068	-6895 to 6895
mbar Resolution	0.2	1	2	4
bar Range	-0.3450 to 0.3450	-1.034 to 1.034	-2.068 to 2.068	-6.895 to 6.895
bar Resolution	0.001	0.001	0.002	0.004
cm/H₂O Range	-351.0 to 351.0	-1055 to 1055	-2109 to 2109	-7031 to 7031
cm/H₂O Resolution	0.2	1	2	4
inch/H₂O Range	-138.0 to 138.0	-415.0 to 415.0	-830.0 to 830.0	-2768 to 2768
inch/H₂O Resolution	0.1	0.3	0.5	2
feet/H₂O Range	-12.00 to 12.00	-35.00 to 35.00	-69.00 to 69.00	-231.0 to 231.0
feet/H₂O Resolution	0.01	0.02	0.04	0.2
mm/Hg Range	-259.0 to 259.0	-776.0 to 776.0	-1551 to 1551	–5171 to 5171
mm/Hg Resolution	0.2	0.5	1	3
inch/Hg Range	-10.00 to 10.00	-31.00 to 31.00	-61.00 to 61.00	-204.00 to 204.00
inch/Hg Resolution	0.01	0.03	0.1	1.0
kg/cm² Range	-0.350 to 0.350	-1.060 to 1.060	-2.110 to 2.110	-7.030 to 7.030
kg/cm² Resolution	0.001	0.001	0.002	0.004
oz/inch² Range	-80.00 to 80.00	-240.0 to 240.0	-480.0 to 480.0	-1600 to 1600
oz/inch² Resolution	0.05	0.2	0.3	1
kPa Range	-34.50 to 34.50	-103.0 to 103.0	-207.0 to 207.0	-690.0 to 690.0
kPa Resolution	0.02	0.1	0.2	0.4



Computer Software for 06-664-18 through 06-664-22 is available. (see page 96) also available Universal Wireless Radio-Signal Transceivers (see page 95)









Displays answer in eight different units. Meter is accurate to 1% full-scale plus 1 digit. Jumbo-size digits are 9.6 mm-high. Computer output allows it to be connected to a computer or data logger for monitoring and keeping results. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

At the touch of a key the unit may be zeroed. Memory key recalls highest and lowest readings. A DATA HOLD key freezes the display to capture readings. Transducer has 6.3 mm NPT male-threaded end. Cable is 1 m. Supplied: Traceable® Certificate, transducer, battery, computer output. Size: 177 x 76 x 38 mm. Weight: $269 \, \text{g}$.

Catalog Number	06-662-68	06-662-69
psi range (resolution)	-14.7 to 725 (1)	-14.70 to 29.0 (0.02)
bar range (resolution)	-1.0 to 50 (0.05)	-1.000 to 2.000 (0.002)
Meter/H₂0 (resolution)	-10 to 509.5 (0.5)	-10.00 to 20.40 (0.02)
Atmospheres range (resolution)	-1.0 to 49.35 (0.05)	-1.000 to 1.974 (0.002)
mm/Hg range (resolution)	-736 to 37500 (50)	-736 to 1500 (2)
inch/Hg range (resolution)	–29 to 1476 (1)	-29 to 59.05 (0.05)
inch/H ₂ 0 range (resolution)	-394 to 20050 (20)	-394 to 802 (1)
Kg/cm² range (resolution)	-1 to 50.95 (0.05)	-1.000 to 2.040 (0.002)





Description	Cat. No.
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 95)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76

Traceable® Conductivity Meter



Traceable® Conductivity for pure water

To assure accuracy, a certificate is provided to indicate instrument traceability to standards provided by NIST (National Institute of Standards and Technology). Use to verify the purity of water from stills, deionizing, and reverse osmosis equipment. Range in microsiemens (micromhos) is 0.1 to 200.0, in megohms is 2.00 to 20.00. Accuracy is $\pm 0.4\%$ full scale. Adjustment permits calibration to solution standards. Ideal for routine analysis, quality control, and research. Eliminates operator technique errors. Probe contains platinum electrodes and a solid-state thermistor (for automatic temperature compensation). Readings are automatically referenced to the international standard of 25°C. Supplied: electronic calibration plug for 10 microsiemens (micromhos) glass probe (139 x 12.7 mm diameter), 1 m cable. Size: 82 x 114 x 38 mm. Weight: 251 g.

Description	Cat. No.
Fisher Scientific Traceable® Conductivity Meter with probe	09-327





Traceable® Bench Conductivity Meter



Turns on, insert probe, read results

Fulfill all official lab analysis regulations for CAP,
ASTM, NCCLS, CLSI, ACS, CLIA, AOAC, EPA, APHA,
AWWA, WEF, USGS, USP, ISO, and Federal/State
regulations. Simply turn on, insert probe into solution, and
read accurate results. Unit automatically encompasses all
ranges and selects the most appropriate for the current reading.
Disable the auto-range function when user-defined ranges are
desired. Control allows user to store four calibration points using
solution standards. Ranges are: 0.01 to 200,000 microsiemens
(micromhos), 0.001 to 20.000 megohms, 0.1 to 20,000 dissolved solids/
parts per million, 2.0 to 42.0 salinity (oceanographic units). Accuracy:
±0.3% +1 digit.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). State-of-the-art microcomputer processor and unique software program allow four calibration points to ensure complete accuracy over the entire range. Readings are displayed in conductivity (microsiemens/micromhos), resistivity (megohms), total dissolved solids (milligrams per litre), salinity (oceanographic units), concentration (user specified units), and temperature (Celsius/Fahrenheit). K factor may be adjusted to match each probe. Specifically designed to measure conductivity in water analysis, biology, chromatography, food, and PC board rinsing.

Computer output

Computer output may be downloaded to a data logger or computer for analysing or reporting at a later time. Makes hard copy results a breeze—no more, hand-scrawled notes to decipher. Supplied probe contains platinum electrodes and a solid-state thermistor for automatic/manual temperature compensation. Readings are automatically referenced to the international standard of 25°C. Temperature compensation is automatic (2% per °C), user-designated (0.000 to 5.000% per °C), or absolute. Exclusive temperature compensation disable function fulfills USP-NF (United States Pharmacopoeia, National Formulary, 645 Conductivity Measurement) requirement.

ABS plastic case withstands the roughest lab environments. Unit comes with 115 VAC adapter, probe replatinizing current, a probe holder arm, battery, and Traceable® Certificate. Supplied glass probe is 133 x 12.7 mm diameter with a cable length of 1.5 m. Size: $209 \times 152 \times 88 \text{ mm}$. Weight: 0.6 kg.

Description	Cat. No.
Fisher Scientific Traceable® Bench Conductivity Meter	09-330
Accessories	
Replacement Conductivity Probe—Glass, K=1, probe range is 0.05 to 200,000 microsiemens (micromhos).	09-326-2A
Accessory Probe—Unbreakable Epoxy, K=1, probe range is 1.0 to 200,000 microsiemens (micromhos).	22-278143

Ranges in Micromhos (microsiemens)	0.01 to 20.00
	0.1 to 200.0
	1 to 2000
	10 to 20000
	100 to 200000
Ranges in Megohms	0.001 to 2.000
	0.01 to 20.00
Ranges in Dissolved Solids/Parts Per Million	0.1 to 20.00
	1 to 200
	10 to 2000
	100 to 20000
Accuracy	±0.3% +1 digit



Traceable® Portable Conductivity Meter



Cat. No.

Quick, accurate results on demand

In an instant, Portable Conductivity Meter automatically selects the proper range and displays the exact answer. This auto-ranging feature may be turned off to accommodate user-entered ranges. All special calibration data is saved even when unit is turned off. Fulfills all government measurement requirements plus CAP, ASTM, NCCLS, CLSI, ACS, CLIA, AOAC, EPA, APHA, AWWA, WEF, USGS, USP, ISO, and Federal/State regulations. Range in microsiemens (micromhos) is 0.01 to 200,000, in megohms is 0.001 to 20.000, range in dissolved solids/parts per million is 0.1 to 20,000, and in salinity is 2.0 to 42.0 (oceanographic units). Accuracy is $\pm 0.3\% + 1$ digit.

Four calibration points

Four unique calibration points may be entered into memory utilizing solution standards. Settings are stored even when the unit is off. Results are displayed in conductivity (microsiemens) and (micromhos), resistivity (megohms), dissolved solids (parts per million), concentration (user-specified units), salinity (oceanographic units), and temperature ($^{\circ}F/^{\circ}C$).

Instant-response probe contains platinum electrodes that deliver highly accurate readings. Internal solid-state thermistor (for automatic/manual temperature compensation) permits all readings to be referenced to the international standard of 25°C. Temperature compensation is automatic (2% per °C), user-designated (0.000 to 5.000% per °C), or absolute. K-factor may be adjusted to match each probe. Exclusive temperature compensation disable function fulfills USP-NF (United States Pharmacopoeia, National Formulary, 645 Conductivity Measurement) requirement.

Use to check the purity of water from stills and demineralizers, to analyse seawater, and to make up solutions. Simply turn on, insert probe, and read—easiest unit ever designed for routine analysis, quality control, and research. Operator technique does not affect readings. Tough, chemical-resistant ABS plastic case assures a long life in severe lab or harsh plant environments. Large 12.7 mm-high LCD digits are easy to read. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Permanent hard copy record

Description

Recorder jack allows continuous monitoring and a permanent record. Arrow keys allow unit to be calibrated to solution standards. Glass probe: 133 x 12.7 mm diameter with a cable length of 1.5 m. Size: 95 x 171 x 38 m. Weight: 453 g. Supplied: glass probe, Traceable® Certificate, and battery.

Fisher Scientific Traceable® Portable Conductivity Meter	09-326-2
Accessories	Cat. No.
Replacement Conductivity Probe—Glass, K=1 Probe range is from 0.05 to 200,000 microsiemens.	09-326-2A
Accessory Conductivity Probe—Unbreakable Epoxy, K=1 Probe range is from 1.0 to 200,000 microsiemens.	22-278143



Ranges in Micromhos	0.01 to 20.000
(microsiemens)	0.1 to 200
	1 to 2000
	10 to 20000
	100 to 200000
Ranges in Megohms	0.001 to 2.000
	0.01 to 20.00
Ranges in Dissolved	0.1 to 20.00
Solids/Parts Per Million	1 to 200
	10 to 2000
	100 to 20000
Accuracy	±0.3% +1 digit



Traceable® Expanded-Range Conductivity Meter





Accurate answers in five seconds

Conductivity meter automatically selects the proper range and displays the exact answer with ease. Unit fulfills CAP, ASTM, NCCLS, CLSI, ACS, CLIA, AOAC, EPA, APHA, AWWA, WEF, USGS, USP, ISO, and Federal/State regulations.

Perfect water tester

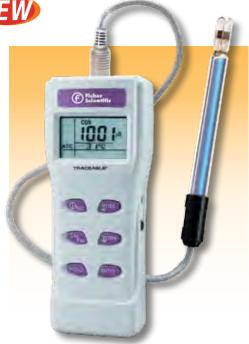
Use this meter to check the purity of water from stills, deionizers, and reverse osmosis, to test laboratory glassware rinsing, to measure total dissolved solids, and to make solutions. Specifically designed to measure conductivity in water analysis, biology, chromatography, food, electronics, dairies, and PC board rinsing. Perfect for all labs wanting to maintain accreditation. Unit is 100% compatible with all accreditation analysis requirements.

Simply turn on, insert probe, and simultaneously read result and temperature. Easiest unit ever designed for routine analysis and quality control. Elimination of operator technique permits everyone in the lab to report identical readings. Tough, chemical-resistant ABS plastic case assures a long life in severe lab or harsh plant environments. Large 12.7 mm-high LCD is easy to read.

Unit permits auto-range or user selected five unique ranges. Complete range is 0.00 to 200,000 microsiemens (micromhos) and 0.0 to 100,000 dissolved solids/parts per million. Accuracy is ± (1% of full scale +1 digit). Switchable temperature range is 0.0 to 80.0°C (32.0 to 176.0°F) with a resolution of 0.1° and an accuracy of 0.6°C. Backlit dual display shows answer and temperature simultaneously. Memory stores up to five unique calibration settings, one in each range. Arrow keys allow fast calibration to solution standards. All calibration data is saved even when unit is turned off. Instant-response glass probe contains platinum electrodes for precise readings. Solid-state thermistor (for automatic/manual temperature compensation) permits all readings to be referenced to the international standard of 25°C. Automatic (2% per °C) temperature compensation or user may set temperature coefficient from 0.000 to 10.000% per °C. Temperature compensation disable function fulfills USP-NF (United States Pharmacopoeia, National Formulary, 645 Conductivity Measurement) requirement. K-factor may be adjusted to match each probe. Total dissolved solids factor is adjustable from 0.4 to 1.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). HOLD key freezes the reading on the display. Computer output permits connecting to a computer. Probe is $152 \times 12.7 \text{ mm}$ diameter with a cable length of 1 m. Size: $69.8 \times 171 \times 28.5 \text{ mm}$. Weight: 184 g. Probe, batteries, and rigid carrying care are supplied.

Description	Cat. No.
Fisher Scientific Traceable® Expanded-Range Conductivity Meter	15-077-977
Data Acquisition System (complete description on page 96)	15-077-73
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76







Computer Output

	_
Ranges in Micromhos (microsiemens)	0.00 to 19.99
	0.0 to 199.9
	0 to 1999
gg	0 to 19.99
	0 to 199.9
Ranges in Dissolved Solids/Parts Per Million	0.00 to 9.99 ppm
	0.0 to 99.9 ppm
	0 to 999 ppm
	0 to 9.99 ppt
	0 to 99.9 ppt
Accuracy	±0.3% +1 digit





Traceable® Dual-Display Conductivity Meter



Two displays simultaneously show conductivity readings and temperature measurements. Measures conductivity in three ranges: 0.1-199.9 microsiemens (micromhos) (0.1 microsiemen resolution), 0.001-1.999 millisiemens (millimhos) (0.001 millisiemen resolution), and 0.01-19.99 millisiemens (millimhos) (0.01 millisiemen resolution). Accuracy is \pm (2% of full scale plus 1 digit). Solid-state thermistor (for automatic/manual temperature compensation) permits all readings to be referenced to the international standard of 25°C. Automatic (2% per °C) temperature compensation or user may set temperature coefficient from 0.0 to 5.0% per °C. Resolution is 0.1 and accuracy is \pm 0.8°C. To assure accuracy an individually serial-numbered Traceable® Certificate is provided to indicate instrument traceability to NIST (National Institute of Standards and Technology) from an ISO 17025 calibration laboratory.

Conductivity Ranges	0.0 to 199.9 micromhos	
commutation, managed		
	0.001 to 1.999 millimhos	
	0.01 to 19.99 millimhos	
Accuracy	±(2% of full scale plus 1 digit)	
Temperature Ranges	0.0 to 60.0 °C	
Temperature Resolution	0.1	
Temperature Accuracy	±0.8°C	

Calibrate using solution standards

Keys adjust probe's K (constant) factor and permit calibration to solution standards. Jumbo-size digits are 35 mm high. Computer output allows connection to a computer or data logger for monitoring and storing results. At the touch of a key, the instrument recalls highest, lowest, and average readings. A data HOLD key freezes the display to capture readings. Unit is supplied with epoxy probe (cable length is 3.3 m), Traceable® Certificate, battery, and computer output. Size: 177 x 76 x 31 mm. Weight: 269 g.

Description	Cat. No.
Fisher Scientific Traceable® Dual-Display Conductivity Meter	06-662-61
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 95)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76

Computer Output

Traceable® Pure H₂O Tester



Meets all lab certification requirements

Specifically designed to test water from stills, demineralizers, deionizers, and reverse osmosis equipment. Meets all lab certification requirements for pure water analysis for CAP, ASTM, NCCLS, USP, and ACS. Single-purpose unit complies with all accreditation analysis requirements. Designed for labs obligated to maintain a periodic check of water purity. To assure accuracy, a Traceable® Certificate is provided to indicate instrument traceability to standards provided by NIST (National Institute of Standards and Technology) from an ISO 17025 calibration laboratory.

Wireless Capable (see page 95)

Accurate readings in an instant

Range is 0.1 to 20,000 microsiemens (micromhos) (from pure to raw water). Accuracy is $\pm 0.4\%$ of full scale. Simple operation eliminates errors and ensures everyone reports identical results. Supplied probe (cable length of 1 m) provides an instant response. Internal, solid-state thermometer ensures all readings are automatically referenced to the international standard of 25°C. Size: 158 x 81 x 33 mm. Weight: 311 g. Supplied: carrying case, instructions, probe, battery, Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Pure H ₂ 0 Tester	06-662-62





Traceable® Conductivity Pens





Three units provide for conductivity, conductivity/total dissolved solids, and salinity. Pen fulfills CAP, ASTM, NCCLS, CLSI, ACS, CLIA, AOAC, EPA, APHA, AWWA, WEF, USGS, USP, ISO, and Federal/State regulations.

Easy to use and waterproof

Simply turn on, insert, and simultaneously read result and temperature. Easiest unit ever designed for routine analysis and quality control. Eliminates operator technique errors. Chemical-resistant, waterproof ABS plastic case assures a long life in severe lab or harsh plant environments. Large 12.7 mm-high LCD digits are easy to read. Dual display shows reading and temperature. HOLD key freezes the reading on the display.

Calibration using solution standards

Arrow keys allow fast setting to calibration standards. Calibration data is saved even when unit is turned off. Instant-response probe and solid-state thermistor provide precise readings. Temperature compensation permits readings to be automatically referenced to the international standard of 25°C or user may set a programmable temperature coefficient. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Waterproof unit is 165 x 35 x 31 mm, Weight: 63 g.



Cat. No.	15-078-200	15-078-201	15-078-202
Description	Fisher Scientific Traceable® Conductivity	Fisher Scientific Traceable® Conductivity/ Total Dissolved Solids	Fisher Scientific Traceable® Salinity
Conductivity Range	0 to 1999 microsiemens 0 to 19.99 millisiemens	0 to 1999 microsiemens 0 to 19.99 millisiemens	_
Dissolved Solid Range	-	0 to 1999 parts per million 0 to 19.99 parts per thousand	-
Salinity Range (NaCL)	-	_	0.00 to 10.00 ppt 10.1 to 70.0 ppt
Resolution	1 microsiemen	1 microsiemen/1 part per million	0.01 ppt
Accuracy	±1% full scale + 1 digit	±1% full scale + 1 digit	±2% full scale + 1 digit
Temperature Range	0.0 to 50.0°C/32.0 to 122.0°F	0.0 to 50.0°C/32.0 to 122.0°F	0.0 to 50.0°C/32.0 to 122.0°F
Temperature Resolution	0.1°	0.1°	0.1°
Temperature Accuracy	±0.5°	±0.5°	±0.5°
Settable Temp. Coefficient	0.0 to 4.0% per °C	0.0 to 4.0% per °C	-
Automatic Temp Compensation	20° and 25°	20° and 25°	25°
Total Dissolved Solids Factor	-	0.4 to 1.00	-
Use with Calibration Standards	400 microsiemens to 19.99 millisiemens	400 microsiemens to 19.99 millisiemens 400 ppm to 19.99 ppt	0.20 to 7.00%



Traceable® Conductivity Standards Certified Reference Material (CRM), ISO Guide 34



Use Standards with all meters

Traceable® Conductivity Standards, a Certified Reference Material, are 100% compatible with all makes of instruments and probes. Traceable® Conductivity Standards are the most accurate available. Accuracy at 25°C is $(\pm 0.25$ microsiemens for 1, 5, 10 microsiemen solution or $\pm 0.25\%$ for other solutions) or the uncertainty shown on the certificate, whichever is greater. Each bottle is labelled for calibrating conductivity (microsiemens/micromhos), resistivity (ohms), and dissolved solids (parts per million).

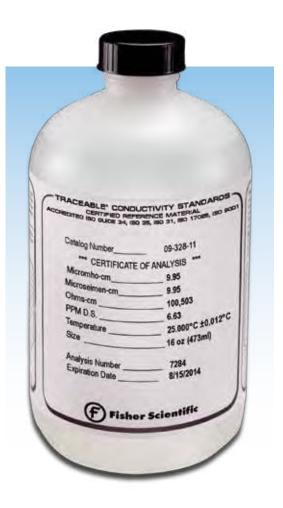
Meets test requirements

This certified reference material meets test requirements for Federal, State, and local agencies, CAP, ASTM, NCCLS, CLSI, ACS, CLIA, AOAC, EPA, APHA, AWWA, WEF, USGS, USP, and ISO. Traceable® Certified Reference Material complies with and is essential for use in these official methods: AOAC 973.40, EPA 120.1, Standard Method 2510 (APHA, AWWA, WEF), ISO 7888, DIN 38404, ASTM D1125, USGS I-1780, USP 645, and for A2LA/ NVLAP accreditations/ISO 9000 certifications. Material may be used to calibrate all conductivity meters and to determine all conductivity cell constants.

A2LA accreditation ISO 17025 and ISO Guide 34 plus ISO 9001

To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology) and/or a National Standards Laboratory. A2LA accredited certification provides the highest achievable level of quality assurance, documentation, and accuracy. Certified Reference Materials are produced in an A2LA accredited ISO 17025 calibration laboratory by an A2LA accredited ISO Guide 34 reference material producer. Additional accreditations include ISO 31 (certificate content) and ISO 35 (statistical analysis), plus ISO 9001 (certified quality manufacturer).

Each bottle is supplied with step-by-step calibration instructions, individual temperature compensation chart, traceability information, and Traceable® Certificate. Supplied in a 473 ml bottle.



Fisher Scientific Traceable® Conductivity Standards Certified Reference Material Accredited ISO Guide 34, ISO 35, ISO 31, ISO 17025

Cat. No.	Cat. No. Individually Tested	Microsiemens/ Micromhos	Megohms	TDS/PPM
15-077-945	15-077-946	1	1	.66
06-664-24	15-077-947	5	0.2	3.3
09-328-1	15-077-948	10	0.1	6.6
09-328-2	15-077-949	100	0.01	66
09-328-3	15-077-950	1000	0.001	666
09-328-11	15-077-951	1413	0.00071	933
09-328-4	15-077-952	10000	0.0001	6666
09-328-5	15-077-953	100000	0.00001	66666
06-664-265	06-664-267	150000	0.000006	100000
06-664-266	06-664-274	200000	0.000005	133333



Traceable® One-Shot™ Conductivity Standard (CRM) Certified Reference Material, ISO Guide 34

Single-use conductivity standards calibrate all conductivity meters and probes for maximum accuracy. One-Shots™ eliminate concern about external container contamination. Calibration is made in the standard's vial. Container fits all probes. Extra-large opening (44 mm diameter) and extra-large, 88 mm depth allow probe calibration to take place in the standard's polyethylene container. One-Shot™ Traceable® standards accommodate all conductivity probes and are ideal for lab or field conditions.

Use Standards with all meters

Traceable® Conductivity Standards, a Certified Reference Material, are 100% compatible with all makes of instruments and probes. Traceable® Conductivity Standards are the most accurate available. Accuracy at 25°C is (± 0.25 microsiemens for 1, 5, 10 microsiemen solution or ± 0.25 for other solutions) or the uncertainty shown on the certificate, whichever is greater. Each container is labelled for calibrating conductivity (microsiemens/micromhos), resistivity (ohms), and dissolved solids (parts per million).

Meets test requirements

This certified reference material meets test requirements for Federal, State, and local agencies, CAP, ASTM, NCCLS, CLSI, ACS, CLIA, AOAC, EPA, APHA, AWWA, WEF, USGS, USP, and ISO. Traceable® Certified Reference Material complies with and is essential for use in these official methods: AOAC 973.40, EPA 120.1, Standard Method 2510 (APHA, AWWA, WEF), ISO 7888, DIN 38404, ASTM D1125, USGS I-1780, USP 645, and for A2LA/NVLAP accreditations/ISO 9000 certifications. Material may be used to calibrate all conductivity meters and to determine all conductivity cell constants.

A2LA accreditation ISO 17025 and ISO Guide 34

To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology) and/or a National Standards Laboratory. A2LA accredited certification provides the highest achievable level of quality assurance, documentation, and accuracy. Certified Reference Materials are produced in our A2LA accredited ISO 17025 calibration laboratory by an A2LA accredited ISO Guide 34 reference material producer. Additional accreditations include ISO 31 (certificate content) and ISO 35 (statistical analysis), plus ISO 9001 (certified quality manufacturer). Each container is supplied with step-by-step calibration instructions, individual temperature compensation chart, traceability information, and Traceable® Certificate. Supplied as a pack of six. Each One-Shot™ contains 100 millilitres.



Fisher Scientific One-Shot™ Traceable® Conductivity Standards, Six Pack Certified Reference Material Accredited ISO Guide 34, ISO 35, ISO 31, ISO 17025

Cat. No.	Quantity	Microsiemens/Micromhos	Megohms	TDS/PPM
06-664-25	6/Pk	5	0.2	3.3
09-328-6	6/Pk	10	0.1	6.6
09-328-7	6/Pk	100	0.01	66
09-328-8	6/Pk	1000	0.001	666
09-328-12	6/Pk	1413	0.00071	933
09-328-9	6/Pk	10000	0.0001	6666
09-328-10	6/Pk	100000	0.00001	66666
06-664-268	6/Pk	150000	0.000006	100000
06-664-275	6/Pk	200000	0.000005	133333
09-328-20	6/Pk	Assortment (one each of the above, except 06-664-25, 06-664-268, or 06-664-269)		268, or 06-664-269)



Traceable® pH Standards, Certified Reference Material











The MOST accurate pH Standards available anywhere

Traceable® pH Standards, Certified Reference Materials, are 100% compatible with all instruments and probes. Accuracy for the Traceable® Buffer at 25° C is ± 0.010 pH—the most precise available. Certified Reference Materials meet Federal/State/local agencies' strictest mandates and deliver exact calibration results for any pH meter.

Certification documentation supplied for every Traceable® Certified Reference Material

A2LA ISO 17025 (Calibration Laboratory) and ISO Guide 34 (Certified Reference Material Producer) provide highest achievable levels of product production, documentation, and accuracy. Additional accreditations include ISO 31 (content) and ISO 35 (statistical analysis). ISO 9001 ensures that world-class product standards for Materials are always met.

Select values are manufactured to IUPAC (International Union of Pure and Applied Chemistry) formulation. All Certified Reference Materials feature resistance to temperature changes and long-term buffer stability. To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology) and/or a National Standards Laboratory.

Each 473 ml bottle is supplied with an individual temperature compensation chart, traceability information, and Traceable® Certificate.



Size	Cat. No.	pH Value
	06-664-259	4.005
473 ml Bottle	06-664-260	7.000
	06-664-261	10.012
100 ml One-Shot™ (pk of 6)	06-664-262	4.005
	06-664-263	7.000
	06-664-264	10.012





Redi-Stor™ Conductivity Probe Storage Solution

Redi-Stor[™] is the ideal solution for storing conductivity probes. It preserves cleanliness, eliminates growths found when storing in water only, and maintains the probe for immediate use with no conditioning.

Description	Cat. No.
Fisher Scientific Redi-Stor™ Conductivity Probe Storage Solution	09-330-1

pH/Conductivity Universal Flow-Thru Adapter

Flow-through adapter is universally designed to accept all 12.7 mm diameter conductivity probes and pH electrodes. Allows constant monitoring of flowing fluids with a standard dip probe. Two 0-rings provide a secure, leakproof seal.

Connectors accept tubing with a 1.5, 2.2, 3 and 8 mm inside diameter. Cell volume depends on the positioning of the probe (approximately 2 to 4 ml). Flow rate may be from 0.001 to 50 millilitres per minute. Constructed of PTFE (universally chemically inert), it may be in constant use at temperatures from -100 to 500°F. Size: 25.4 millimetres diameter x 57 mm.

Description		Cat. No.
	Fisher Scientific nH/Conductivity Universal Flow-Thru Adapter	06-662-59



Workstation Spilltray™ and Drying Rack

Eliminate spills with this chemical-resistant, maintenance-free, polyethylene containment tray. Use one at each workstation or fumehood to safely handle chemicals and liquids while pipeting, measuring, or mixing. Holds 1.25 litres of spilled liquid. Easy to clean—simply lift off the white grid and empty.

Low profile design is perfect for drying glassware and delicate items. Plastic grid cushions and protects against breakage and scratches. Grid cuts drying time in half by permitting air circulation. Easel permits drying odd shaped items. Entire unit is dishwasher safe. Tray folds up to 110 mm creating an incline of 45 degrees. Size: $419 \times 330 \times 15.8 \text{ mm}$. Weight: 453 g.

Description		Cat. No.
	Fisher Scientific Spilltray™ and Drying Rack	02-401-9





Traceable® Dissolved Oxygen Meter



Simultaneously displays oxygen concentration and temperature. Computer output allows it to be connected to a computer or data logger for monitoring and keeping results. Jumbo-size digits are 35 mm high. At the touch of a key the instrument recalls highest, lowest, and average readings. A DATA HOLD key freezes the display to capture readings.

To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: probe, 1 m cable, two replacement probe heads, electrolyte solution, battery, computer output, carrying case, Traceable® Certificate. Size: 177 x 76 x 31 mm. Weight: 269 g.

Description	Range	Resolution	Accuracy
Dissolved oxygen measurement	0.00 to 20.00 mg/L	0.1 mg/L	±0.4 mg/L
DO measurement % air saturation	0.00 to 100% air saturation	0.1%	±0.7% mg/L
Temperature measurement	32.0 to 140°F/ 0.0 to 60°C	0.1°	±1.5°F/0.8°C
Automatic temperature compensation	mg/l mode: 0.0 to 60.0°C, % air mode: 0.0 to 60.0°C		
Salinity compensation	0 to 39%		
Altitude compensation	0 to 3900 m		





(see page 95)



Description	Cat. No.
Fisher Scientific Traceable® Dissolved Oxygen Meter	06-662-66
Data Acquisition System (complete description on page 96)	11-661-22
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76



Traceable® Dissolved Oxygen Meter Pen





Compact, rugged design

Tough ABS plastic case and water-resistant design with 0-ring seal and membrane keypad assures a long life in severe lab or harsh plant environments. HOLD key freezes the reading on the display. High contrast, easy to read 9.6 mm high LCD digits simultaneously display oxygen concentration and temperature. At the press of a key, unit recalls minimum/maximum readings. Designed for intuitive, easy operation by everyone.

Traceable to NIST

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Rugged ABS plastic case is 38 x 203 mm; weight is 141 grams. Supplied with a Traceable® Certificate, two spare probe heads with membranes, electrolyte solution, nylon carry case, and four batteries.

Description	Cat. No.
Fisher Scientific Traceable® Dissolved Oxygen Meter Pen	15-078-199

	1.0		: _
Description	Range	Resolution	Accuracy
Dissolved oxygen measurement	0.0 to 20.0 mg/l	0.1 mg/l	±0.4 mg/l
Dissolved oxygen measurement % air saturation	0.0 to 100% air saturation	0.1%	±0.7% mg/l
Temperature measurement	32.0 to 122°F/0.0 to 50°C	0.1°	±1.5°F/0.8°C
Automatic temperature compensation	0.0 to 50.0°C		





Traceable® Light Meter Pen *** **VEW**





Dual range and easy operation

Meter reads from 0 to 1,860 foot-candles with a resolution of 0.1, and from 0 to 20,000 Lux with a resolution of 1. Accuracy is ±5% of reading plus 5. Simple operation eliminates the need to refer to instructions. Designed for intuitive, easy operation by everyone. Tough, ABS plastic case with O-ring seal and membrane keypad keep out dust and dirt, assuring a long life in severe lab or harsh plant environments. HOLD key freezes the reading on the display. High contrast 9.6 mm-high LCD digits are easy to read.

Traceable to NIST

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Rugged ABS plastic case is 38 mm diameter x 203 mm; Weight: 141 grams. Supplied: Traceable® Certificate and four batteries.

Description	Cat. No.
Fisher Scientific Traceable® Light Meter Pen	15-078-189

Traceable® Dual-Range Light Meter



Dual-Range Meter reads both lux and foot-candles on a large 12.7 mm-high display. An analog output of 0.1 millivolt per digit allows readings to be captured by a recorder. Precision selenium photovoltaic cells and microprocessor provide for a fast-response sampling rate of 0.4 seconds and an automatic zero adjustment. Display update rate may be set to 1 or 2 seconds. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). HOLD key freezes the display to capture readings. Precise photodiode and colour-correction filter provide cosine- and colour-corrected measurements.

Readings in lux and foot-candles

Dual-Range Meter measures lux in three ranges: 0 to 1999 (1 lux resolution), 2000 to 19,990 (10 lux resolution), and 20,000 to 50,000 (100 lux resolution). Readings in foot-candles: 0 to 199.9 (0.1 Fc resolution), 200 to 1999 (1 Fc resolution), 2000 to 5000 (10 Fc resolution). For accuracy see chart. Unit is supplied with 50 mm diameter photocell, 3.3 m cable, Traceable® Certificate, battery, and recorder output. Size: 165 x 76 x 38 mm. Weight: 283 g.

Description	Cat. No.
Fisher Scientific Traceable® Dual-Range Light Meter	06-662-63

Range		Resolution	Accuracy
	0 to 1999 lux	1 lux	±5% reading + 10 lux
Lux	2000 to 19,999 lux	10 lux	±5% reading + 100 lux
	20,000 to 50,000 lux	100 lux	±5% reading + 100 lux
_	0 to 199.9 Fc	0.1 Fc	±5% reading + 1 Fc
Foot- Candles	200 to 1999 Fc	1 Fc	±5% reading + 10 Fc
	2000 to 5000 Fc	10 Fc	±5% reading + 100 Fc





Traceable® Dual-Display Light Meter



Dual displays show lux or foot-candles, or percent differential from a reference point, and the selected light source (daylight, tungsten, fluorescent, or mercury). Traceable® light meter has computer output that allows it to be connected to a computer or data logger for monitoring and keeping results. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Readings in lux and foot-candles

Dual-Display Meter measures lux in three ranges: 0 to 1999 (1 lux resolution), 2000 to 19,990 (10 lux resolution), and 20,000 to 50,000 (100 lux resolution). Readings in foot-candles: 0 to 199.9 (0.1 Fc resolution), 200 to 1,999 (1 Fc resolution), 2,000 to 5,000 (10 Fc resolution). For accuracy see chart. Unit has zero reference settings for all light sources.

Unit recalls highest, lowest, and average readings at the touch of a key. HOLD key freezes the display to capture readings. Precise photodiode and colour-correction filter provide cosine- and colour-corrected measurements. Jumbo-sized digits are 35 mm high. Supplied: 50 mm diameter photocell, Traceable® Certificate, battery, and computer output. Probe: 50 mm diameter photo cell/1 m cable length. Size: 177 x 76 x 31 mm. Weight: 269 g.

Range		Resolution	Accuracy
	0 to 1999 lux	1 lux	±4.5% full scale
Lux	2000 to 19,999 lux	10 lux	±4.5% full scale
	20,000 to 50,000 lux	100 lux	±4.5% full scale
_	0 to 199.9 Fc	0.1 Fc	±4.5% full scale
Foot- Candles	200 to 1999 Fc	1 Fc	±4.5% full scale
Canalos	2000 to 5000 Fc	10 Fc	±4.5% full scale



Description	Cat. No.
Fisher Scientific Traceable® Dual-Display Light Meter	06-662-64
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 95)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76



Traceable® Ultraviolet Light Meter

Light meter has an UV wavelength range of 320 to 390 nm. Traceable® Ultraviolet Light Meter measures on three different ranges from 0 to 199.9 μ W/cm² (resolution 0.1 μ W/cm²), 1.999 mW/cm² (resolution 0.001 mW/cm²), and 19.99 mW/cm² (resolution 0.01 mW/cm²). Accuracy is \pm (2% of full scale plus 2 digits).

Connect to computer or data logger

Traceable® Light Meter has computer output that allows it to be connected to a computer or data logger for monitoring and keeping results. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Cosine- and colour-correct measurements

Unit recalls highest, lowest, and average readings at the touch of a key. HOLD key freezes the display to capture readings. Precise photodiode and colour-correction filter provide cosine- and colour-corrected measurements. Supplied: 19 mm diameter photocell (1 m cable), Traceable $^{\circ}$ Certificate, battery, computer output, carrying case. Size: 177 x 76 x 31 mm. Weight: 269 g.

Range	Resolution	Accuracy
0 to 199.9 μW/cm ²	0.1 μW/cm²	±4 μW/cm² + 1 μW/cm²
200 to 1.999 mW/cm ²	0.001 mW/cm ²	±0.04 mW/cm ² + 0.01mW/cm ²
2.00 to 19.99 mW/cm ²	0.01 mW/cm ²	±0.4 mW/cm ² + 0.1 mW/cm ²



Description	Cat. No.
Fisher Scientific Traceable® Ultraviolet Light Meter	06-662-65
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 95)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76





Traceable® Sound Level Meter



Three-decibel ranges

Features three-decibel ranges for greater precision: low (35.0 to 80.0 dB), medium (50.0 to 100.0 dB), and high (80.0 to 130.0 dB). Resolution is 0.1 dB and accuracy is ± 2 dB. Unit provides weightings for both A (frequencies for 500 to 10 kilohertz) and C (frequencies from 30 to 10 kilohertz) to meet IEC 651 Type-2 standards.

Adjustable response time

Response time may be set to fast (0.2 seconds) or slow (1.5 seconds). A handy memory data-hold function stores the highest reading achieved for later display. It fulfills OSHA requirements. Unit uses a 12.7 mm condenser microphone. A recorder jack permits capturing readings (AC and DC 10 mV/dB). Use the threaded tripod insert for long-term measurements. To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). Unit is supplied with 9-volt alkaline battery and carrying case. Size: 254 x 76 x 25.4 mm. Weight: 269 g.

Description	Cat. No.	
Fisher Scientific Traceable® Sound Level Meter	11-661-6A	

Traceable® Analog Sound Meter



Easy-to-operate, Traceable® Analog Sound Meter provides fast readings on a colour-coded scale. It quickly indicates over and under decibel readings. Measures from 54 to 126 decibels in seven ranges 60, 70, 80, 90, 100, 110, 120 dB. Switch permits weightings for either A (frequencies from 500 hertz to 10 kilohertz) or C (frequencies from 30 hertz to 10 kilohertz). Accuracy is ±3dB. Features include: analog output for connecting to chart recorders, maximum key for locking on highest reading for peak sounds, and switch for selecting fast or slow response.

To assure accuracy an individually serial numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). Unit is supplied with battery, low battery checker, threaded insert for tripod, and Traceable® Certificate. Size: 63 x 177 x 38 mm. Weight: 155 g.

Description	Cat. No.
Fisher Scientific Traceable® Analog Sound Meter	06-664-29





Traceable® Tachometer with Red LED Pointer



Touchless handheld point-and-shoot tachometer targets a rotating object and provides instant precision results

Optical no-contact measurements are made by placing a piece of reflective tape on the rotating object. Red LED light locks on the self-adhesive reflective tape (24" supplied) and counts rotations. In two seconds it provides rock solid answers from 10 to 99,999 revolutions per minute (RPM). Five-digit resolution is 0.001, 0.01, 0.1, or 1 depending on the revolutions displayed.

Quartz-crystal accuracy

Unit is designed to measure centrifuges, pumps, rollers, shafts, gears, motors, and moving surfaces. For accuracy see chart. HOLD key freezes results. Precision quartz-crystal insures stable and repeatable results. LCD digits are 12.7 mm-high and may be read from 3 metres. Low battery condition is indicated on the display. Impact-resistant ABS case protects the unit.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: $120 \times 44 \times 31 \text{ mm}$. Weight: 113 g.

Description	Cat. No.	
Fisher Scientific Traceable® Ta	chometer with Red LED Pointer	02-401-3

Range	Resolution	Accuracy
10 to 99.99 RPM	0.001 RPM	±0.04% of reading + 0.02 RPM
100.00 to 999.99 RPM	0.01 RPM	±0.04% of reading + 0.2 RPM
1000.00 to 9999.99 RPM	0.1 RPM	±0.04% of reading + 2 RPM
10000 to 99999 RPM	1 RPM	±0.04% of reading + 22 RPM





Traceable® Contact Tachometer



Any rotating surface may be touched by the cone convex tip, funnel concave tip, or speed wheel for instant results

Tachometer displays revolutions per minute (RPM) from 10.000 to 99,999 (resolution 0.001, 0.01, 0.1, 1). In addition, it reports results in feet per minute 3.0000 to 30,000, yards per minute 1.000 to 10,000, and meters per minute 1.000 to 9999.9 (resolution for all three is 0.0001, 0.001, 0.01, 0.1 depending on the revolutions displayed).

Unit is designed to measure centrifuges, pumps, rollers, shafts, gears, motors, and moving surfaces. For accuracy, see chart. HOLD key freezes reading. Precision quartz-crystal insures stable and repeatable results. Short sampling time provides answers in two seconds. LCD digits are 12.7 mm-high and may be read from 3 metres. Low battery condition is indicated on the display. Impact resistant ABS plastic case protects the unit.

To assure accuracy an individually serial-numbered Traceable $^{\circ}$ Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). Size: $120 \times 44 \times 31$ mm. Weight: 113 g.

Description	Cat. No.
Fisher Scientific Traceable® Contact Tachometer	02-401-2

Range	Resolution	Accuracy
10.000 to 99.999 RPM	0.001 RPM	±0.04% of reading + 0.01 RPM
100.00 to 999.99 RPM	0.01 RPM	±0.04% of reading + 0.1 RPM
1000.0 to 9999.9 RPM	0.1 RPM	±0.04% of reading + 1 RPM
10000 to 99999 RPM	1 RPM	±0.04% of reading + 10 RPM





Traceable® Digital Laser Tachometer



Touchless, no contact operation is safe and easy. Tachometer measures revolutions per minute with laser pin-point accuracy anywhere from 70 mm away from any rotating object. Labs and plants use this high accuracy unit to read speeds of centrifuges, motors, and stirrers. Five digit LCD is a highly visible 9.6 mm-high. Laser beam reflects off self-adhesive tabs to give readings of 10 to 99,999 revolutions per minute. Resolution is 0.1 below 1000 and 1 above. Accuracy is ± 1 RPM or 0.05%.

Traceable to NIST for accuracy

Utilizes a precision quartz-crystal for an accurate time base. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Takes only a second for most readings. Memory feature permits recalling last reading at any time.

Supplied: Traceable® Certificate, four alkaline batteries, rugged ABS plastic case, self-adhesive reflecting tabs, internal light, carrying case. Size: 76 x 209 x 38 mm. Weight: 276 g.

Description	Cat. No.
Fisher Scientific Traceable® Digital Laser Tachometer	05-028-24



Traceable® Touchless/ Contact Digital Tachometer



Labs use this high-accuracy unit to check speeds of centrifuges, motors, or stirrers. Five digit LCD is 12.7 mm high. Tachometer takes only three seconds for most readings. A unique memory feature permits recalling the highest, lowest, and last reading. Unit is extremely easy to use; operation may be learned in one minute. One end of the unit provides contact readings with a rotating spindle. The other end makes touchless readings using a beam of light. The light may be held as far away as 304 mm. The light beam reflects off self-adhesive tabs to provide readings of 0.1 to 99,999 revolutions per minute (RPM). The contact end of the instrument measures speeds of 0.1 to 19,999 revolutions per minute, 0.05 to 1999.9 meters per minute, and 0.2 to 6560 feet per minute. Resolution in all modes is 0.1 below 1000 and 1 above 1000. For accuracy see chart. Utilizes a precision quartz-crystal for an accurate time base. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Supplied: batteries, Traceable® Certificate, rugged ABS plastic case, self-adhesive reflecting tabs, internal light, cone for RPM, wheel for RPM, wheel for surface speeds, carrying case. Size: $63 \times 215 \times 38$ mm. Weight: 297 g.

Description	Cat. No.
Fisher Scientific Traceable® Touchless/Contact Tachometer	05-028-23

Range	Resolution	Accuracy
0 to 999.9 RPM	0.1 RPM	±0.05% of reading + 0.1 RPM
1000.00 to 99999 RPM	1 RPM	±0.05% of reading + 1 RPM



Traceable® Moisture Meter



Meter's memory contains nine material groups and calibrations

Traceable® Moisture Meter displays material, wood, wood product, and paper moisture content 9.0 to 30.0% with a resolution of 0.1% and an accuracy of $\pm (4\%$ of the reading plus 5 digits). Memory contains nine material groups such as fibreboard, construction material, and calibrations for 150 types of wood. Applications include foods, grains, chemicals, pharmaceuticals, cosmetics, sludge, soil, and automotive liners. For all other products, user establishes reference moisture readings. Once programmed, the meter reports directly in percent moisture. Simply touch a material to measure moisture. Takes only seconds. Unit provides for automatic and manual temperature compensation.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology). Computer output allows it to be connected to a computer or data logger for monitoring and capturing results. At the touch of a key the instrument recalls highest, lowest, and average readings. HOLD key freezes the display to capture readings. Stores results on a computer or data logger. Jumbo-size digits are 35 mm high. Supplied: probe, ten spare pins, Traceable® Certificate, battery, and computer output. Size: 177 x 76 x 31 mm. Weight: 269 g.

Description	Cat. No.
Fisher Scientific Traceable® Moisture Meter	06-662-67
Data Acquisition System (complete description on page 96)	11-661-22
Data Logger (complete description on page 95)	06-662-72
Fisher Scientific Universal Wireless Radio-Signal Transceivers (complete description on page 95)	15-077-76







Computer Output



Traceable® Digital Auto-Range Multimeter



Designed specifically for checking the electrical functions of scientific equipment in laboratories. Perfect unit to test batteries, fuses, recorder outputs, cables, wall plugs, probes, printed circuit boards, and complex electronic instrumentation. Save money and time by solving problems and eliminating costly repairs. Unit ranges are from 1 millivolt to 400 volts AC/DC and 0.1 to 2,000,000 ohms. Accuracy is 2 units, or 2% of the reading. The multimeter instantly displays the correct answer by automatically selecting the proper range. Four-digit, 9.6 mm-high LCD shows the exact resistance or voltage unit and indicates negative polarity with a minus sign.

To assure accuracy an individually serial-numbered Traceable® Certificate is supplied to indicate traceability to standards provided by NIST (National Institute of Standards and Technology).

Features an audible beep for checking continuity, ensuring instant detection of shorts/opens in probes, cables, or circuit boards. Sampling rate is twice a second. Intuitive operation makes instructions almost unnecessary.

Supplied: case, batteries, pair of needle probes, pair of alligator probes, instructions. Size: $54 \times 107 \times 12.7$ mm. Weight: 85 g.

Description	Cat. No.
Fisher Scientific Traceable® Digital Auto-Range Multimeter	01-241-1



Traceable® Battery Tester



Traceable® Battery Tester checks alkaline, carbon, , mercury, nickel-cadmium, and other batteries. Tests battery voltages from 1.35 to 12 volts on 13 ranges. Accuracy is $\pm 5\%$.

Traceable to NIST for accuracy

Simple colour-coded scale immediately indicates battery condition. Individually serial-numbered Traceable® Certificate is provided to indicate traceability to standards provided by NIST (National Institute of Standards and Technology).

Actually tests the battery

Provides true resistive load readings equal to real-world usage. Tests batteries under actual operating conditions. Twenty-six precision resistors provide true representative loads for all batteries. Superior to voltmeters that provide no-load values.

Requires no internal battery

Pays for itself by eliminating battery replacements. Self-powered; requires no internal battery. Checks any battery in one second.

Accurate and long-lasting

Gold-plated printed circuit board and silver-plated switches ensure both accuracy and a long life. Small $(88 \times 63 \times 25.4 \text{ mm})$ and lightweight (85 g) unit comes with two test leads (69 cm-long cables), Traceable® Certificate.

Description	Cat. No.
Fisher Scientific Traceable® Battery Tester	14-648-16





Universal Wireless Radio-Signal Transceivers



Wireless radio transceivers send results from Traceable® instruments to a computer 91 metres away, without cables. Send readings from Traceable® thermometers, hygrometers, barometers, light meters, anemometers, manometers, dissolved oxygen meters, conductivity meters and more directly to your computer. Audible/visual notification alarms are sent instantly. Supplied: both serial and USB user selectable connections for the computer. Works with Windows® 98/Me/NT/2000/XP/Vista/Windows 7.



Plug and play units are preconfigured for out-of-the-box use, no software is used. Entire setup takes less than two minutes. Units work where there is other wireless equipment, in harsh industrial areas with electrical noise, and indoor or outdoor locations. Signal penetrates walls. Supplied complete with power supply, antennas, serial and USB connections.

Description		Cat. No.
	Fisher Scientific Universal Wireless Radio-Signal Transceivers	15-077-76

Use the Fisher Scientific Universal Wireless Radio-Signal Transceivers with the following Products:

Data Acquisition System Cat. No.	Product Description	Page No.	Product Cat. No.
11-661-22	Fisher Scientific Traceable® Pressure/Vacuum Gauge	84	06-662-68/69
11-661-22	Fisher Scientific Traceable® Dual-Display Light Meter	96	06-662-64
11-661-22	Fisher Scientific Traceable® Ultraviolet Light Meter	96	06-662-65
15-077-73	Fisher Scientific Traceable® Manometer/Pressure/Vacuum Gauges	83	06-664-18/22
15-077-71	Fisher Scientific Traceable® Digital Thermometer	3	15-077-8/15-078-1
15-077-72	Fisher Scientific Traceable® Memory Wide-Range Thermometer	29	15-078-2
15-077-70	Fisher Scientific Traceable® Humidity/Temperature/Dew Point Meter	71	11-661-7B/7A
15-077-72	Fisher Scientific Traceable® General-Purpose Hygrometer/Thermometer	68	11-661-8
11-661-22	Fisher Scientific Traceable® RTD Platinum Thermometer	25	15-077-55
11-661-22	Fisher Scientific Traceable® Double Thermometer	30	15-077-26
11-661-22	Fisher Scientific Traceable® Dual-Display Conductivity Meter	88	06-662-61
11-661-22	Fisher Scientific Traceable® Humidity/Thermometer	72	11-661-21
11-661-22	Fisher Scientific Traceable® Moisture Meter	101	06-662-67
11-661-22	Fisher Scientific Traceable® Infrared Digital Thermometer	36	15-077-56
11-661-22	Fisher Scientific Traceable® Dissolved Oxygen Meter	94	06-662-66
11-661-22	Fisher Scientific Traceable® Hot Wire Anemometer/Thermometer	79	06-662-73
15-077-72	Fisher Scientific Traceable® Anemometer/Thermometer	78	06-664-28
15-077-73	Fisher Scientific Traceable® Expanded Range Conductivity Meter	87	15-077-977
15-077-73	Fisher Scientific Traceable® Memory Hygrometer/Thermometer	72	06-664-271

Accessories

Cat. No.	Description
15-077-74	USB Extension Cable (45 metres long)
15-077-75	Serial Extension Cable (15 metres long)



Data Logger

Data Acquisition System



Powerful, new software technology allows up to eight unique Traceable® meters to simultaneously capture data and stream it directly (or via e-mail) to any iPhone®, Blackberry®, or computer. Easily keeps track of results for thermometers, hygrometers, barometers, light meters, anemometers, manometers, dissolved oxygen, conductivity, and more. Every minute—or any pre-set time increment—data is captured and stored. Readings are saved to a file that can be viewed, printed as-is, or merged in a report or spreadsheet format. Data continues to be collected in the background even when user works on other software programs. Networking server/client capability allows data to be monitored on a remote workstation. 24/7 audible/visual alarms remind user to check on data. This significant technology breakthrough easily installs in less than two minutes—the cable is simply connect to the meter and to a USB port (or serial port) and data capturing begins. Designed to work with Windows® 98/Me/NT/2000/XP/Vista/Windows 7.

Supplied with software: CD, 2 metre cable (USB, serial, and meter connections). Multiple extensions expand cable length to 91 metres.



Use this software with the following products:

Data Acquisition System Cat. No.	Product Description	Page No.	Product Cat. No.
11-661-22	Fisher Scientific Traceable® Pressure/Vacuum Gauge	84	06-662-68/69
11-661-22	Fisher Scientific Traceable® Dual-Display Light Meter	96	06-662-64
11-661-22	Fisher Scientific Traceable® Ultraviolet Light Meter	96	06-662-65
15-077-73	Fisher Scientific Traceable® Manometer/Pressure/Vacuum Gauges	83	06-664-18/22
15-077-71	Fisher Scientific Traceable® Digital Thermometer	3	15-077-8/15-078-1
15-077-72	Fisher Scientific Traceable® Memory Wide-Range Thermometer	29	15-078-2
15-077-70	Fisher Scientific Traceable® Humidity/Temperature/Dew Point Meter	71	11-661-7B/7A
15-077-72	Fisher Scientific Traceable® General-Purpose Hygrometer/Thermometer	68	11-661-8
11-661-22	Fisher Scientific Traceable® RTD Platinum Thermometer	25	15-077-55
11-661-22	Fisher Scientific Traceable® Double Thermometer	30	15-077-26
11-661-22	Fisher Scientific Traceable® Dual-Display Conductivity Meter	88	06-662-61
11-661-22	Fisher Scientific Traceable® Humidity/Thermometer	72	11-661-21
11-661-22	Fisher Scientific Traceable® Moisture Meter	101	06-662-67
11-661-22	Fisher Scientific Traceable® Infrared Digital Thermometer	36	15-077-56
11-661-22	Fisher Scientific Traceable® Dissolved Oxygen Meter	94	06-662-66
11-661-22	Fisher Scientific Traceable® Hot Wire Anemometer/Thermometer	79	06-662-73
15-077-72	Fisher Scientific Traceable® Anemometer/Thermometer	78	06-664-28
15-077-73	Fisher Scientific Traceable® Expanded Range Conductivity Meter	87	15-077-977
15-077-73	Fisher Scientific Traceable® Memory Hygrometer/Thermometer	72	06-664-271



Data Logger

Accessory Data Logger

Complete DAS–4TM System captures and stores up to 8000 bytes (over 1000 readings). Readings may be taken at intervals from 1 second to 99 hours. Stored readings may be downloaded to any PC and viewed. Can be read as-is or imported to spreadsheets, databases, and statistical programs. Includes Windows CD, and a 1 metre cable (supplied USB, serial, and instrument connections). Cable plugs into instrument and computer. Batteries supplied. Size: $127 \times 76 \times 25.4$ mm. Weight: 198 g. For use with Traceable® Meters featuring computer output.

Description	Cat. No.
Fisher Scientific Data Logger	06-662-72

Use this Data Logger with the following Cat. No.	Page No.
15-077-26	30
15-077-56	36
11-661-21	72
06-662-73	79
06-662-68	84
06-662-69	84
06-662-61	88
06-662-67	101



Variable-Speed Peristaltic Tubing Pump

Compact, variable-flow, bi-directional, self-priming, peristaltic pumps offer precise flow deliveries. Ideal for use with conductivity flow-thru cells, liquid chromatography, collecting fractions, pH/circulating fluids or buffers in baths, and moving corrosive materials. They provide outstanding flow control and flexibility for transferring and dosing liquids. Fluid contacts only the tubing for contamination-free pumping.

Flow rates are from 0.005 millilitres per minute to 600 millilitres per minute. Variable-speed flow control and five different tubing sizes provide fine resolution with a wide flow range. The revolution of one roller delivers a precisely measured volume specific to the tubing size and motor speed. May be used with up to 36 metres of tubing for remote sampling.

Tubing may be used with fluid temperatures from -80 to 500°F (-62 to 260°C). Use with food, pharmaceuticals, and other critical solutions. The tubing may be sterilized by autoclave. Unit pumps liquids and gases. Pumping dry does not harm the pump.



Pump has a purge/prime switch for high-speed emptying/filling. It also reverses at the touch of a switch for ease in draining tubing. Three rollers reduce flow pulsation, prevent siphoning, and eliminate the need for check valves. There are no valves to clog, no seals to leak. The 120 VAC CSA-approved wall power supply ensures that a safe 12 volts drive the pump motor. Comes with a battery connector for portable use with any 9 or 12-volt battery. Pump draws so little power it will run for five months on a car battery.

Supplied with silicone tubing, and polypropylene fittings/nipples, 115 VAC wall power supply, and an accessory battery connector (battery not supplied). Packaged in a chemical-resistant ABS plastic case. Size: 168 x 120 x 114 millimetres. Weight: 0.5 kg. One-year warranty.

Description	Cat. No.
Fisher Scientific Variable-Speed Peristaltic Tubing Pump Ultra-Low Flow 0.005 to 0.900 ml/minute	13-876-4
Fisher Scientific Variable-Speed Peristaltic Tubing Pump Low Flow 0.03 to 8.20 ml/minute	13-876-1
Fisher Scientific Variable-Speed Peristaltic Tubing Pump Medium Flow 0.4 to 85.0 ml/minute	13-876-2
Fisher Scientific Variable-Speed Peristaltic Tubing Pump Medium/High Flow 4.0 to 600 ml/minute	13-876-3

Variable-Flow Chemical Transfer Pump

Designed specifically for pulseless fluid transfer at variable flow rates. Pumps from 120 to 2,250 millilitres per minute. Pumps fluids with a viscosity to 200 centipoises. Suction lift is 3 metres wet, 101 mm dry. May be used with fluid temperatures from -40 to 200°F (-40 to 93°C). Barbed inlet/outlet ports use any type of tubing with an inside diameter (nominal 4.7 mm).

Direct-drive engineering provides maximum motor power to the pump. Continuous-sweep variable control provides precise, seamless speed control. The chemical-resistant, wetted parts are Dupont Delrin®, 304 stainless-steel, Viton, and PTFE. Pump has a purge/prime switch for high-speed emptying/filling. It also reverses for ease in draining tubing. May be used with up to 36 m of tubing for remote sampling. Pump comes ready to use with 115 VAC UL-rated wall power supply. Case is chemical-resistant ABS plastic. Size: 203 x 120 x 120 mm. Weight: 1.47 kg.

Description	Cat. No.
Fisher Scientific Variable-Flow Chemical Transfer Pump	15-077-67





Traceable® Ultra-Low Flow Meter

Compact, fully contained, ready to operate, no assembly required. Ready to run right out of the box. Simple 4-key operation (Flow/Total, Units, Zero and Power) and easy to read LCD make this meter extremely user-friendly. Display shows the current flow and total accumulated flow.

Accuracy is ±2% full scale with liquid temperatures of 20 to 30°C; otherwise, ±4% full scale. May be used with fluid temperatures from 32 to 122°F (0 to 50°C). Unit permits adjusting a viscosity compensation correction. Chemically resistant nylon 1.5 mm barbed inlet/outlet connectors are compatible with all types of tubing.

Traceable to NIST for accuracy

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: wall power adaptor and a battery connector for portable use. Meter draws so little power it will run for six months on a car battery. Case is constructed of chemical-resistant ABS plastic. Size: 168 x 120 x 114 mm. Weight: 0.45 kg. One-year warranty.

Description	Cat. No.
Fisher Scientific Traceable® Ultra-Low Flow Meter	06-664-253







Displays flow rates and total flow of fluids in seven user selectable units of measure:

Range	Resolution	Unit
4 to 30.00	0.01	millilitres/minute
0.004 to 0.030	0.0001	liters/minute
4.00 to 30.00	0.01	cubic centimetres/minute
0.135 to 1.01	0.01	fluid ounces/minute
0.001050 to 0.00742	0.00001	gallons/minute
0.140 to 1.05	0.01	fluid imperial ounces/minute
0.00088 to 0.00659	0.00001	imperial gallons/minute

Standard Check Valves



Chemical-resistant check valves

 $Tubing\ barbed\ check\ valves\ are\ constructed\ of\ chemical-resistant\ Kynar^{\$}\ body\ and\ Viton^{\$}\ valve\ for\ any or of\ chemical-resistant\ Kynar^{\$}\ body\ and\ Viton^{\$}\ valve\ for\ chemical-resistant\ kynar^{\$}\ body\ and\ Viton^{\$}\ body\ and\ valve\ for\ chemical-resistant\ kynar^{\$}\ body\ and\ kynar^{\$}\ body\ and\ kynar^{\$}\ body\ and\ kynar^{\$}\ body\ any\ body\$ an inert, high-purity, smooth and clear flow path. Prevents damage to equipment, pumps, and flow systems by preventing backflow. Use with acids, bases, water, chemical processing, and alcohols. Use for liquids, gases, pressure, and vacuum applications. Operating ranges are 0 to 50 PSI and -40 to 126°C. Autoclavable, zero maintenance, unit installs in any position.

Description	Qty.	Use Tubing I.D. size	Overall Size	Cat. No.
Fisher Scientific Chemical-Resistant Check Valve	6/pk	3.175 mm	31 mm	15-078-208
Fisher Scientific Chemical-Resistant Check Valve	6/pk	119 mm	31 mm	15-078-209
Fisher Scientific Chemical-Resistant Check Valve	6/pk	6.3 mm	31 mm	15-078-210
Fisher Scientific Chemical-Resistant Check Valve	6/pk	9.6 mm	31 mm	15-078-211







Dust-It[™] Blower

Powerful bulb duster forcibly blows away dust, lint, and dirt. It provides high-pressure, pinpoint jets of air exactly where desired. Varying the squeeze provides for controlled delivery. One-way inlet valve at the top stops air/dust from being drawn through the tip. Non-conductive plastic sleeve-tip prevents scratches and permits cleaning optical lenses, slides, circuit boards, and cuvettes. It's ideal for delicate, difficult-to-clean, and inaccessible equipment. Dust'it™ provides the best environmentally safe solution. Size: 57 mm dia. x 127 mm. Weight: 56 g.

Description	Cat. No.
Fisher Scientific Dust-It™ Blower (pack of 3)	14-649-59

Electrode Holder

Pays for itself by speeding up batch sampling and reducing probe breakage. NASA Space Shuttle engineering assures smooth and effortless operation. Performs like a robot arm in zero gravity.

Ideal for multiple conductivity or pH readings

Fingertip control raises, lowers, and pivots (360 degrees) the perfectly balanced electrode holder wherever desired. Moves in all directions; holds electrodes safely and securely in any selected position. Electrode arm articulates at three points so electrodes always remain vertical.

Accepts all brands

It is designed to accept any standard glass, reference, combination or other electrode—or conductivity probe, and a temperature probe. Three openings allow holder to simultaneously accept two electrodes and one temperature probe. Weighted die-cast metal base and spring counterbalance permit fluid movement with superior stability. Complete with 53 cm metal arm, 20.3 cm diameter. Weight: 2.7 kg.

Description		Cat. No.
	Fisher Scientific Electrode Holder	22-286-439



Arm extends to 53 cm







Hose/Tubing Clamp Assortment Kit

Eliminate leaks

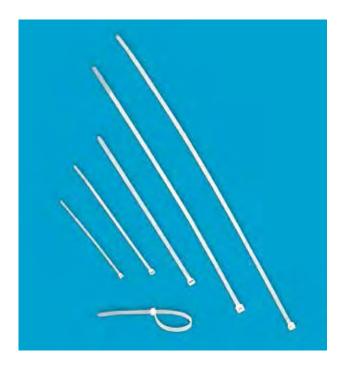
Clamps securely fasten tubing to connectors, pumps, glassware, and filtration units. Chemical-corrosion-resistant, rustproof, non-conducting nylon is ideal for use in wide temperature range of 32 to $194^{\circ}F$ (0 to $90^{\circ}C$).

May be sterilized

One-piece, reusable clamp squeezes shut for a leak-proof seal. Pressing on the side releases the clamp. Designed specifically for pressure, vacuum, and liquid applications where a secure seal is required. Tight-Seal™ is the only clamp that works with all types of plastic and rubber tubing. May be chemically or gas-sterilized for biomedical or food applications. Available in 13 sizes, clamps have an inside diameter of 6.25 to 40.90 mm. Assortment includes 65 clamps, 5 of each of the 13 sizes. Handy kit ensures that the proper size immediately available.

Description	Cat. No.
Fisher Scientific Hose/Tubing Clamp Assortment Kit	05-815

Hose/Tubing Clamps		
Cat. No.	Inside Clamp Diameter	
Pack of 100	Millimeters	
05-815-1A	6.25 to 7.37	
05-815-1B	9.14 to 10.31	
05-815-1C	10.41 to 11.89	
05-815-1D	12.07 to 13.61	
05-815-1E	13.67 to 15.44	
05-815-1F	15.16 to 16.89	
05-815-1G	17.02 to 19.81	
05-815-1H	18.54 to 21.08	
05-815-1J	22.10 to 24.77	
05-815-1K	24.21 to 27.76	
05-815-1L	26.21 to 30.15	
05-815-1M	31.75 to 36.20	



Tight-Ties[™] Assortment Kit

Cable ties feature a unique tapered tip for fast insertion and tightening. One-piece, self-locking ties are made of tough, chemical-corrosion-resistant, rustproof, non-conducting nylon. Applications include affixing tubing to pumps, bundling materials, hanging equipment.

Usable in wide temperature range

Use in the wide temperature range of -40 to 85° C. Tensile strength is 12 to 50 pounds. When fastened, the diameters adjust 2.60 to 101.60 mm).

Description	Cat. No.
Fisher Scientific Tight-Ties™ Assortment Kit Includes 400 including five sizes.	06-662-58



Anti-Static Static-Away™ Brush



Anti-Static Static-Away™ Brush eliminates the possibility that static will damage sensitive lab work, affect balance results, or harm microchip-driven instruments.

Power to take the ZAP out of static

Brush dissipates static while whisking away harmful dust, lint, and dirt from your work environment. New design blends natural hair and synthetic conductive fibres that simply remove static as it cleans. Because it won't scratch critical surfaces, it's ideal for cleaning film, slides, optics, cuvettes, balance pans, microscopes, electronics, and computer monitors. It has a conductive composite handle.

Maintain accurate readings

Use the compact brush to clean electronic balances and avoid pan weight variances caused by static. Long handle brushes allow access to difficult places and eliminates the possibility of a hand touching. Weight: 14.7 g.



15-078-213

Description	Brush width	Handle length	Cat. No.
Fisher Scientific Anti-Static Static-Away™ Brush	63 mm	38 mm	03-405-1
Fisher Scientific Anti-Static Static-Away™ Handle Brush	25.4 mm	127 mm	15-078-212
Fisher Scientific Anti-Static Static-Away™ Handle Brush	50 mm	127 mm	15-078-213
Fisher Scientific Anti-Static Static-Away™ Handle Brush	76 mm	152 mm	15-078-214

Clear Plastic Lab Wrap

Tight seal

Wrap is designed specifically for the lab with low-tangle properties to insure that it doesn't ball up when handled. It also has high-cling properties to enable wrapping a beaker, flask, or petri dish with an extraordinary tight seal that stays in place. The clarity of the film allows you to see through it. The distinctive proprietary formulation yields ultraclean film to ensure sample purity and eliminate contamination. It is made of 100% polyethylene.

The carton has a metal tear-off bar for ease in achieving the exact size needed. The carton also has unique flaps which prevents the roll from leaving the box. Plastic wrap Size: 304 mm wide by 30 m long.

Description	Cat. No.
Fisher Scientific Clear Plastic Lab Wrap	22-305-654







Description	Cat. No.
Fisher Scientific Standard Cheesecloth Wipes Brilliant white, 228 mm-square pad (8-ply) unfolds to approximately 457 x 914 mm, 60/dispenser box (pictured left)	06-665-29
Fisher Scientific Cheesecloth Mini-Wipes Brilliant white, 101 mm-square pad (8-ply) unfolds to approximately 177 x 355 mm, 200/box (pictured right)	06-665-28
Fisher Scientific Certified Cheesecloth Bolt 100-yard bolt, 355 mm wide (not pictured)	22-055-053

Optik-Wipes™

One swipe makes eye glasses sparkle. Designed specifically for wiping goggles, lenses, eyeglasses, gauge windows, plastic glasses, fume hood windows, optical parts, and microscopes/magnifiers. Clean smudges, dirt, dust, and the static that attracts them. Works equally well with glass and plastic. Pre-moistened cloths easily remove oil, grease, and lint.

Won't rip apart

Nonwoven cloth is premoistened with a unique formulation and is soft and lint-free. Constructed of



cellulose and polyester, it will not scratch surfaces or fall apart. Wipe material is 90% biodegradable. Individually dispensed wipe is handy and ready for instant use. Each canister is shrink-wrapped for use in clean rooms. Reclosable container assures a clean wipe every time and eliminates contamination from dust or dirt. Microfibre cloth to polish lenses is included. Individual pop-up 152 x 228 mm wipes are packaged 100 per polyethylene canister.

Description		Cat. No.
	Fisher Scientific Optik-Wipes™	15-077-63

Reagent-grade quality

New wipes are certified to be 100% pure cotton of reagent-grade quality and purity. They meet all lab requirements for cleanliness, softness, absorbency, and strength. Cheesecloth Wipes absorb 6 times their own weight of both solvents and aqueous solutions. They never scratch surfaces or fall apart.

Clean any optical grade surface

Use them to wipe cuvettes and microscopes, clean cameras, and dry delicate glassware, syringes, pipettes, and pH electrodes. Because they are inert to even harsh solvents, they are ideal as a filtering material. Certified Cheesecloth Wipes meet cleanliness specifications of USP (United States Pharmacopoeia) and Federal Specification CCC-G-101c. Individually dispensed wipes eliminate time-consuming cutting of bolts of cloth and the dust, dirt, and waste associated with handling difficult-to-store rolls.

Clean-Wipes™

New universal clean-up tool

Pre-moistened Clean-Wipes™ clean even the dirtiest parts.

Non-woven cloths are moistened with a blend of pure, reagent-grade 70% isopropyl alcohol and 30% reagent-grade deionized water or 100% pure reagent-grade deionized water. They are ideal for wiping optical parts, delicate glassware, electrodes, cuvettes, microscopes, or lenses. Wipes are also available dry, with no solution. This permits using any



liquid by simply adding 236 ml to the wipe canister. Instantly clean metals, plastics, glass, rubber, and epoxies. Use for cleaning electronics, computer screens, instruments, probes, glassware, syringes, pipettes, cameras, and lab counters. Wipes are designed for all applications in environmentally sensitive areas.

Lint-free

Very strong, nonwoven cloth is soft and lint-free. Constructed of cellulose and polyester, it will not scratch surfaces. Wipe material is 90% biodegradable. Meets all lab and production requirements for cleanliness, softness, absorbency, and strength. Long-lasting wipes never fall apart like paper towels. Individually dispensed wipes are handy and ready for instant use. Unique opening allows wipes to virtually glide out when pulled. Reclosable bench top container assures a clean wipe every time. Snapon sealed top eliminates contamination from dust or dirt. Each canister is provided in shrink-wrap or a sealed bag to maintain cleanliness for use in clean rooms. Size: 152 x 228 mm and packaged 100 per polyethylene canister.

Description	Cat. No.
Fisher Scientific Premoistened Alcohol/DI Clean-Wipes™ 70% reagent-grade isopropyl alcohol and 30% reagent-grade deionized water	06-665-24
Fisher Scientific Premoistened DI Clean-Wipes™ 100% pure reagent-grade deionized water	06-665-23
Fisher Scientific Dry Clean-Wipes™ User adds any solution	06-664-14



Slide Holders/Cabinet

Store microscope slides with ease, speed, efficiency

Organise and classify your slides for instant reference and fingertip-fast retrieval. Use the index-card Microscope Slide Holders to sort, classify, or arrange slides in any order. Fingers never touch the slide.

Adapt to any file system

Cards may be added, removed, or changed for fast updating and filing—insert a new card anywhere. You will never outgrow this system. Adapts instantly to your slide ID system (numbers, letters, dates, names, or colour coding). Visible, four-position tabs provide always-in-sight indexing. Ruled data lines are keyed to numbered slots and allow complete slide identification, plus your comments.

Protect vital specimens from contamination

The durable holder is 76 x 127 mm cardboard fitted with a protective plastic frame. It ensures safe, clean, scratchproof, and secure protection for your specimens. Slides never touch. One hundred percent compatible with any and all makes of slides. Each slide holder card accepts four slides of 75 x 25 mm or 76 x 25.4 mm size of any thickness.

Description	Cat. No.
Fisher Scientific Slide Holders, 12-pack	12-588-25
Fisher Scientific Slide Holders, 12-pack with file box	12-588-20
Fisher Scientific Slide Holder Cabinet, 1 Drawer Steel cabinet stores 100 slide holders, a total of 400 slides. Dimensions: 130 x 165 x 412 mm	12-588-30
Fisher Scientific Slide Holder Cabinet, 2 Drawer Steel cabinet stores 200 slide holders, a total of 800 slides. Dimensions: 130 x 317 x 412 mm	22-267-369





Liquid Alarm

Liquid Alarm may be placed anywhere. Use it to detect when drums, tanks, flasks, or beakers are close to overfilling. It's the perfect reminder for unattended filling of any container. The moment a solution touches the sensor, the alarm sounds and a red LED light flashes continually until the liquid no longer touches the sensor.

Alarm sounds for hours

Place the sensor on the floor to detect spills. It allows taking action before a serious situation develops. A loud, high-decibel alarm sounds and a red LED light flashes until the sensor is removed from liquid. Constantly alarms for over 30 hours. Position the detector on an overflow tube or near a pump to alert you when an accident is occurring. Cable length is 3 metres. Use with aqueous solutions and liquids that don't attack plastic. Battery-operated alarm sounds even during power outages. Pays for itself by preventing just one ruined lab test. Size: 46 x 76 x 19 mm. Weight: 70 g. Supplied: battery.

Description	Cat. No.
Fisher Scientific Liquid Alarm	20-324





Spray-Anywhere™ Adjustable Sprayer

Sprayer changes any bottle into a wash bottle, turns any reagent into a spray. Chemical-resistant and virtually unbreakable sprayer is made of polypropylene. It's ideal for hot, cold, aqueous, and solvent-based solutions. The entire unit may be gas or chemically sterilized and is dishwasher-safe.

Measured delivery

Sprayer has a continuously adjustable spray for every requirement. Set it on fine-mist, needle, or big-steam. Closed position maintains solution purity by preventing evaporation and air/dust contamination. Trigger is comfortable for one-handed operation. Provides controlled delivery and requires a very light pressure. Contoured shape fits in the hand and reduces finger fatigue when pumping continuously. Instant-off release eliminates messy drips on the bench.

Use with any container

A cone-shaped universal adaptor bung fits virtually all glass, plastic, and metal containers, bottles, and flasks. Fits inside diameters from 25.4 mm to 35 mm. Tube diameter is 6.3 mm. Tube length is 0.8 m.

Description	Cat. No.
Fisher Scientific Spray-Anywhere™ Adjustable Sprayer	14-648-48

Adjustable Spray Wash Bottles

Wash Bottles with an adjustable spray

Wash Bottles have an adjustable spray for every requirement. Set the nozzle on fine mist for TLC plates, position it to needle to rinse glassware, and pump a continuous, forceful jet on the big stream position for washing filters.

No-effort pumping

The pump trigger is comfortable for one-handed operation, provides controlled delivery, and requires a very light pressure. Ease of use reduces finger fatigue. Contoured to fit in the hand, it makes the awkward-to-grasp, difficult-to-pump, and impossible-to-control squeeze bottle obsolete. The instant-off trigger release eliminates messy drips on the bench. Chemical-resistant and virtually unbreakable bottle is made of high-density polyethylene (HDPE). The sprayer is made of polypropylene (PP). Ideal for hot, cold, aqueous, and solvent-based solutions. The entire wash bottle may be gas or chemically sterilized. It may be cleaned in the lab dishwasher.

Zero contamination

Closed position on sprayer maintains solution purity by eliminating overnight evaporation and air/dust contamination. Squat shape takes up little bench space and assures a low centre of gravity to eliminate tip-over problems. Double-headed design, available only in the 1000 millilitre size (1 litre), has a convenient side-fill opening to help maintain purity of solutions. When bottle is empty, the double-headed feature eliminates removing a pump and allows refilling in seconds through a separate opening.

Description	Cat. No.
Fisher Scientific Double-headed Adjustable Spray Wash Bottle 1000ml (lower left)	03-405
Fisher Scientific Adjustable Spray Wash Bottle 240ml (3/pack) (upper right)	03-405A







Microprobes, 6-pack

Six scientific shapes for manipulating micro work

Microprobes are ideal for lab applications—positioning samples under a microscope, dissecting, inspecting, soldering, gluing, and all micro-manipulation in the lab.

Hundreds of uses

Probes are excellent for hooking small springs, packing columns, cleaning miniature parts, and soldering boards (solder will not stick to probes). Precision-ground, highly polished, hardened, and tempered stainless-steel instruments are designed for quality-control and experimental requirements. The tips are hand-honed to needle sharpness. Handles are non-slip and ergonomically designed. Probe length is 152 mm. Six different shapes are supplied in a handy carrying case.

Description	Cat. No.
Fisher Scientific Microprobes, 6-pack	08-850



Knife Set

Fine precision cutting tools for the lab are provided by this high-quality knife set. Ultra-micro to heavy-duty cutting edges are perfect for corks, paraffin, plant samples, and rubber tubing. Exceptionally sharp knives are ideal for delicate, close-tolerance, accurate cutting needs.

High-grade steel construction

Blades are made of the highest-grade steel and are ground to razor sharpness for precision cutting. Features include positive-holding blade lock, non-slip ergonomic handles, and a perfect weight for balance.

Over 47 blades

Comes complete with 8 different handles, 47 sharp blades, and an aluminiumoxide, wet/dry sharpening stone. Set is packed in a handy plastic carryingstorage case with magnets to keep blades in place.

Description	Cat. No.
Fisher Scientific Knife Set	08-850-5



Micro Spatulas, 4-pack

Perfect for handling extremely small samples with ease

Use spatulas to dispense/transfer expensive chemicals, place particulate matter in weighing containers, apply micro amounts of adhesive for tacking down specimens, and mix small granular samples.

Four sizes

Use with balances, microscopes, and weighing boats. Flat-ended, steel blades have widths of 0.1 mm, 0.3 mm, 0.5 mm, and 1.0 mm. Handles are colour-coded for easy size identification. Overall length is 63.5 mm.

Description	Cat. No.
Fisher Scientific Micro Spatulas, 4-pack	14-372-5





Labtool II™

Stainless-steel Labtool II™ with aluminium handle is the ideal device to help with lab needs. Fourteen tools provide for hundreds of laboratory and plant requirements—use the opener for chemical bottles, the saw to reduce cork stoppers, the knife to cut tubing, and much more. Supplied: pliers/gripper, wire stripper, wire cutter, ruler, small knife, large knife, serrated knife, punch, flat head screwdriver, Phillips™ screwdriver, bottle opener, needle, saw, and serrated stripper. Pocket size unit measures just 88 mm when closed, Weight: 198 g.

Description	Cat. No.
Fisher Scientific Labtool II™	14-649-75

Original Labtool™

Fits in your pocket and provides 14 tools at-the-ready. This compact, folding multi-tool was specifically designed for today's needs. Double lock safety system helps protect against accidental injury. Provides for hundreds of laboratory and plant requirements—use the file to score or break glass tubing, the opener for chemical bottles, the saw to reduce cork stoppers, the knife to cut tubing, and much more. Has pliers/gripper, wire cutter, inches/millimetre ruler, knife, file, nut driver, large/medium/small flat head screwdrivers, Phillips™ screwdriver, bottle/can opener, wood saw, and serrated blade. Constructed of stainless-steel for years of heavy-duty use. Measures just 101 mm long when closed. Weight: 283 g.

Description	Cat. No.
Fisher Scientific Original Labtool™	15-226-1



Cat. No.

14-649-76







Ultrasonic Automatic Measuring Meter

Simply point and shoot to measure distance, area, and volume. Designed specifically for easy and intuitive use. After one minute, you'll never again look at the instructions. LCD displays exactly which measurement is being made. One-key operation automatically performs length, area, or volume calculations. Audible beep confirms each measurement. Three distance memories and one calculation memory are maintained even when the unit is off. Memory permits computing areas and volumes from stored measurements. Calculator function permits addition/subtraction of readings.

Range: 0.61 to 15.24 meters. Resolution is 0.1 feet and 0.01 meters with accuracy of $1\% \pm 1$ digit. Instantly converts meters to feet or vice versa with the push of a key. Utilizes the newest-generation, high-precision ultrasonic sensor. Designed for indoor/outdoor use. Automatically and accurately compensates for temperature from 32 to $104^{\circ}F$ (0 to $40^{\circ}C$). Supplied: battery. Size: $130 \times 66.6 \times 28.5$ mm. Weight: 155 g.

Description	Cat. No.
Fisher Scientific Ultrasonic Automatic Measuring Meter	06-664-17



Laser Pointer

Perfect pocket laser pointer for slide presentations, detailed scientific discussions, microscope projections, field studies, wall charts, and lectures. Provides a brilliant red light at the highly visible 630–680 nm wavelength with a beam diameter of 3.5 mm. Laser Class IIIA has an output power of 5 mW and a range of over 91 metres. Two batteries provide months of intermittent use or 2 hours of continuous use. Size: 12.7 mm diameter x 139 mm. Weight: 39 g. Supplied: batteries and pocket clip.

Description	Cat. No.
Fisher Scientific Laser Pointer	11-994-1



Laser Key-Chain

Pointer's brilliant red beam works equally well in daylight and dark. Laser is designed specifically for slide presentations, wall charts, and field use. Beam is at the highly visible 650 nm wavelength with diameter of 3.5 mm. Output is 4 mW with a range of 121 metres. Key-chain makes it easy to carry. Size: $63 \times 25.4 \times 6.3$ mm. Weight: 14.7 g. (battery not included)

Description	Cat. No.
Fisher Scientific Laser Key-Chain	02-401-6



Key-Chain Micro-Laser Pointer

Laser is perfect for slide presentations, wall charts, and lectures. Provides a brilliant red light at the highly visible 650 nm wavelength with a beam diameter of 3.5 mm. Power Class III laser has an output power of 4 mW and a range of 91 m.

Three batteries provide months of intermittent use or 2 hours of continuous use. Switch is momentary on/off. Size: 14 mm diameter x 60 mm. Weight: less than 28 ge. Supplied: batteries and key-chain.

Description	Cat. No.
Fisher Scientific Key-Chain Micro-Laser Pointer	11-994-2



Humidity Sponge™ Regenerable/Indicator

The latest in drying technology turns any container into a desiccator. Indicator bag particles show when moisture capacity has been reached.

Nontoxic and ideal for clean rooms

Humidity Sponges™ meet US FDA requirements for use in direct contact with food and drugs. Desiccant (sodium calcium aluminosilicate hydrate) is nontoxic and is a GRAS (generally recognised as safe) material. It is ideal for storing food/pharmaceutical samples, electronics, PC boards, optics, chemicals, and equipment. Outer material is made of DuPont's Tyvek® breathable, high-density polyethylene. Zero-Dust bags are certified as Class M3.5 (formerly Class 100) clean room compatible.

Retains 16% moisture, guaranteed

Drying capability depends on volume, temperature, and moisture. As a benchmark, one bag will maintain dry conditions in a container with a volume of two gallons (476 cubic inches/7800 cubic centimetres). Bags are guaranteed to retain 16% moisture by weight; typical results are 37% moisture absorption. Each bag measures $76 \times 76 \times 6.3$ mm. Weight: 10 g.

Indicator Humidity Sponges™

Indicator Sponge has one side of clear film and one of white Tyvek®. It contains blues particles which turn pink when the desiccant has reached its moisture capacity and needs to be replaced. Indicator Humidity Sponge™ cannot be regenerated.

Regenerable Humidity Sponges™

Regenerable Sponge has white Tyvek® on both sides and may be regenerated and reused continuously. Regeneration requires heating in an oven at 220°F (104°C). Included in each pack is a Relative Humidity Card which changes from blue to pink to show when sponges need to be regenerated. Tyvek® is a registered trademark of DuPont.

Description	Cat. No.
Fisher Scientific Humidity Sponge™ Regenerable (40-pack)	07-580-1
Fisher Scientific Humidity Sponge™ Indicator (40-pack)	07-580



Desi-Vac™ Containers

Desiccator with a vacuum pump is ideal for drying, preserving, storing, and even shipping samples. Vacuum pump built into the top removes air with manual strokes. Rubber O-ring-sealed cover maintains vacuum. Achieves a vacuum of better than 5 m of water (381 mm of mercury). A release key on top allows air into the plastic container to remove the lid.

Keeps powder dry

Use desiccants to keep material dry—ideal for storing chemicals, powders, sample tissues, and plant sections, and for weighing samples.

Description	Diameter	Height	Volume		Cat. No.
Fisher Scientific Desi-Vac™ Vacuum Pump Container	114 mm	127 mm	42 in ³	700 cc	08-664-5A
Fisher Scientific Desi-Vac™ Vacuum Pump Container	127 mm	184 mm	91 in³	1500 cc	08-664-5C
Fisher Scientific Desi-Vac™ Vacuum Pump Container	215 x 177 mm	184 mm	183 in³	3000 cc	15-077-955





Permanent Marking Pen Assortment

Produce precise lines of 0.3-mm width. Perfect marking pens for lab samples, microscope slides, photographic slides, glass and plastic beakers, and plastic sample bags. Writes on all surfaces including glass, film, wood, plastic, metal, rubber, and porcelain. Unique stainless-steel long leg allows precise writing in a limited space. Instant writing, long storage time, and dry-out prevention are assured by an airtight ring seal cap.

Permanent ink dries in a split second and is waterproof and fade proof. Colours are opaque black, vivid red, blue, and green. Thinnest permanent line ever developed is sharp, precise, and clear.

Cat. No.	Colour & Quantity	Size
13-383	6 black, 2 red, 2 blue, 2 green	0.3 mm
13-383C	Black/ 6 pack	0.3 mm
13-383D	Red/ 6 pack	0.3 mm
13-383E	Blue/ 6 pack	0.3 mm
13-383F	Green/ 6 pack	0.3 mm

Scientific Technical Pen Assortment

Record results in lab notebooks, fill in charts, draw graphs, mark recording paper, and produce diagrams. Pen's unique, long leg lays flat against rulers and flexible curves for accurate alignment. This precision pen is perfectly balanced to feel good in your hand. Instant writing, long storage time, and dry-out prevention are ensured by an airtight ring seal in the cap. Pen responds the moment it is touched to paper.

Long lasting, no bleeding

Smooth-flowing, fade-proof ink is a patented formulation. Instant-drying ink eliminates smearing and bleeding. Extra-large ink reservoir assures half-mile write out. Colours are ultra-black (opaque black for making superb photocopies), vivid red, blue, and green.

Narrow 0.2 mm lines

Perfect and precise lines are drawn at first stroke with the long-legged, highly polished stainless-steel point tube. Durable wear-free plastic tip glides smoothly across a page. Tip stays sharp—won't mush up. Narrow line is sharp, precise, clear, and constant. Line sizes are 0.2 mm and 0.4 mm. Order an assortment and a pack of your favourite colour.

Cat. No.	Size	Colour	# In Pack
133831	0.2 and 0.4 mm	Red, Blue, Green and Black	12
13-383-1A	0.2 mm	Black	6
13-383-1B	0.4 mm	Black	6
13-383-1C	0.2 mm	Red	6
13-383-1D	0.4 mm	Red	6
13-383-1E	0.2 mm	Blue	6
13-383-1F	0.4 mm	Blue	6
13-383-1G	0.2 mm	Green	6
13-383-1H	0.4 mm	Green	6



Glassware Rescuer[™]

Rescue glassware using diamonds

Save your glassware, recover beakers, and preserve your flasks with this handy industrial diamond file. Instead of tossing glassware because of a chip, now you can rescue it. Half round/half flat shape smooths sharp and jagged edges.

Never discard chipped glassware again

Pays for itself in 30 days by making your glassware safe for use. Also may be used to score glass tubing for breaking. No-slip-grip handle is easy to hold. File diameter is 6.3 mm, file length 101 mm, overall length 203 mm.

Description	Cat. No.
Fisher Scientific Glassware Rescuer™	15-223-20

Flexible-Arm™ Light

Moves in all directions

Flexible-Arm™ places light exactly where needed. It's ideal for inspection, quality control, electronics, and sample examination. Fingertip bar raises, lowers, and pivots the perfectly balanced lamp wherever desired. It moves 360 degrees in three dimensions. The arm smoothly articulates at three points. Spring counterbalance permits smooth and fluid movement with superior stability. Stylish design is geared specifically for the lab. It is engineered with durable metal construction for years of heavy use. The shade is compact and vented, has rolled edges, and a safety-glass cover with a UV filter for eye protection.

Natural daylight

Designed specifically to reduce distortion, increase contrast, and give visual clarity up to 40% greater than typical lamps. It is ideal for viewing samples, photographs, PC boards, and reading. It brings out the finest details and renders colours accurately. Beam closely resembles daylight for correct colour detection. The natural light is virtually glare-free.

Perfect task lamp

Supplied with 3 kg, 177 mm diameter metal base for the bench. In addition, it comes with clamping unit for positioning vertically or horizontally to the top or side of any edge. Supplied: white reflector and 35 watt bright halogen white light. Weight: 3.6 kg. UL listed, 115 VAC.



Description	Arm Length	Cat. No.
Fisher Scientific Flexible-Arm™ Natural-Light™ Light	508 mm	15-077-65
Fisher Scientific Flexible-Arm™ Natural-Light™ Light	787 mm	15-077-66



2X Magnifier Lamp

Magnifier Lamp is the ideal tool to view objects at two times magnification in bright light, with high-contrast and a sharply defined focus. Designed specifically for lab and plant applications requiring precise work. Useful in inspection, electronics, quality control, sample examination, and biological analysis.

Magnifies large area

Large viewing area (101 \times 63 mm) is easy on the eyes. Highly polished optical glass 2X lens provides a crisp and distinct image with vivid enhancement of surface details. Sliding shutter cover protects lens from dust and scratches when not in use.

Bright light makes examination easy

Supplied with a 60-watt incandescent bright bulb to light the exact area to be viewed. Brilliant light beam closely resembles daylight for optimal colour detection and clarity. Convenient front handle provides fingertip control to raise, lower, and pivot the magnifier wherever desired. Extension is 78 cm. Clamps vertically or horizontally to the top or side of any edge. UL- and CSA-listed.

Description	Cat. No.
Fisher Scientific 2X Magnifier Lamp	12-071-10





Hands-Free™ Fold-up Magnifiers

Hands-Free™ Magnifiers allow two-handed examination of objects. They provide a sharp, crisp, distinct image with vivid enhancement of details. Some sizes provide battery-powered brilliant illumination for precision work (batteries supplied).

Magnifiers have perfect focus with zero distortion

Designed specifically for use in quality control, labs, food, electronics, manufacturing, and universities. White ruler markings in both inches and millimeters on the lower panel assist in making measurements. All-glass optics assure perfect focus with zero distortion. Magnifiers fold twice for compact storage.

Cat. No.	Magnification	Lens Diameter	Lighted
14-648-19	2.5 X	117 mm	YES
14-648-20	2.5 X	63 X 88 mm	YES
14-648-21	3.0 X	76 X 76 mm	N0
14-648-22	3.5 X	88 x 50 mm	N0
14-648-23	5.0 X	127 X 31 mm	N0
14-648-24	7.0 X	177 X 22 mm	N0
14-648-25	10.0 X	254 X 12.7 mm	YES





Illuminated Microscope

Pocket Microscope magnifies view. An indispensable tool for anyone who needs to see things at high magnification in bright light, with true colour, high contrast, and a sharply defined focus. Handheld unit is perfect for inspection, quality control, field use, electronics, metal analysis, clinical observation, cloth/paper examination, and plant studies. Adjustable light source directs the bright bulb onto the exact area to be examined. An adjustable focus control knob produces a rock-solid view.

Rugged microscopes

Case is chemical- and shock-resistant ABS plastic. Zoom microscope comes with snap-on microscope slide holder accessory. Supplied: batteries and a vinyl carrying case (model 12-071-6E only). Pocket-sized units measure 139 x 38×22 mm and weigh only 85 g.

Description	Cat. No.
Fisher Scientific Illuminated Microscope 30X	12-071-6E
Fisher Scientific Illuminated Microscope (60X to 100X with snap-on slide holder)	12-071-6D

Illuminated Magnifier

Powerful lighted magnifiers provide perfect-focus, highly-defined view of surface details and illuminate uniformly. Units feature state-of-the-art LED lamps and provide bright, even light.

Superior LED lamp-life is nearly 20 times that of conventional incandescent illumination and virtually eliminates bulb replacement. Lamps low-power consumption and high-efficiency also improves battery life and performance. Supplied: replaceable batteries.

Magnification	Cat. No.
Fisher Scientific Illuminated Magnifier 2X with 4X spot (Large size, 69.8 x 69.8 mm window)	12-071-6A
Fisher Scientific Illuminated Dual Magnifier 3X with 10X (Medium size, 44 x 44 mm window)	12-071-6B
Fisher Scientific Magnifier with adjustable focus 8X (Small size, 25.4 mm diameter, not illuminated)	12-071-6C

Lab Label Maker™



Quickly and easily make labels for chemicals, bottles, shelves, and equipment. Self-adhesive coloured tape sticks powerfully to any surface including glass, plastic, metal, rubber, or wood. Raised white letters on 9 mm wide tape are readable from 2.4 m. Operation is easy: dial a letter, squeeze the handle, and when finished pull down black lever in the front of the unit to cut the tape. Easy-PeelTM perforation allows the label backing to be removed quickly and efficiently.

Low cost permits a label maker at every workstation

Lab Label Tape™, available in multiple colours, allows for colour coding labels for specific requirements. Label tape can be unloaded and reloaded in less than 30 seconds. No batteries needed, unit is always ready to use. Supplied: two rolls of tape, blue and red.



Description	Dimensions	Cat. No.
Fisher Scientific Lab Label Maker™		15-078-203
Fisher Scientific Lab Label Tape™ Black, 4 roll/pk	9.5 x 3000 mm	15-078-204
Fisher Scientific Lab Label Tape™ Red, 4 roll/pk	9.5 x 3000 mm	15-078-205
Fisher Scientific Lab Label Tape™ Blue, 4 roll/pk	9.5 x 3000 mm	15-078-206
Fisher Scientific Lab Label Tape™ Green, 4 roll/pk	9.5 x 3000 mm	15-078-207

Write-On™ Aluminium Tags

Permanently engrave your warnings, messages, instructions, or sample number on these aluminium metal tags. Write on them with an ordinary ballpoint pen. Features a soft centre that takes messages on both sides.

Use in any environment

Extremely durable and suited for use in hot, cold, and moist environments. Handy size of 79×28.5 mm makes it ideal for tagging valves, tubing, samples, and cylinders. Package includes $48 \, \text{tags}$ with wires.

Description	Cat. No.
Fisher Scientific Write-On™ Aluminium Tags	06-662-57







Counter-Pen™

Counter-Pen™ is a combination marker and digital counter designed for the lab and plant. Each time a black mark is made with the felt-tipped pen, it automatically sounds a beep, and LCD displays the count. Use it to count cell growths on petri dishes, inventory parts, and tally samples received.

Touch, sound, and count occur simultaneously. Impossible to make an error, even when interrupted—marks hold your place and counter holds your total. Durable ABS plastic unit provides audio/visual counts to 99999 with reset key, on/off switch, and pen cap. Size: 152 x 16 mm. Weight: 28.3 grams.

Description	Cat. No.
Fisher Scientific Counter-Pen™	14-649-77



Digital Counter

Lightweight counter reads to 99,999. Water-resistant, O-ring-sealed and shock-resistant ABS plastic case is ideal for lab and plant use. Tactile click keys provide positive action.

Completely electronic

Easy-to-read LCD and solid-state construction eliminate gear and miscount problems associated with mechanical counters. Fail-safe design eliminates accidentally resetting. Size: $66.6 \times 42 \times 21$ mm. Weight: 28.3 grams. Supplied: battery.

Description	Cat. No.
Fisher Scientific Digital Counter	07-905-2

Digital Key-Chain Counter with Wrist Strap

Key-Chain/Wrist-Strap/
Carabiner Digital Counter is
designed for ease-of-use and
fail-safe counting. Features
include display count to 99,999,
two year constant use battery,
water-resistant O-ring-sealed
with shock-resistant ABS
plastic case, key click for count
confirmation, and recessed
no-accident reset.

Eliminates gear and miscount problems associated with mechanical counters. Diameter is 47 mm by 12.7 mm. Weight: less than 28 g.



Description	Cat. No.
Fisher Scientific Digital Key-Chain Counter/Wrist Strap	14-649-78





Hand Tally Counter

Easy-to-use, four-digit unit records up to 9999. Numbers instantly and automatically return to zero with a twist of the reset knob. Hundreds of lab applications provide opportunities to: count blood samples, take surveys, inventory items, total drops of liquid, receive lab samples, and tally biomedical events.

Long-lasting metal construction

For ease in viewing, large white numerals appear on a black background. A protective window seals out dust, dirt, and humidity. The rugged, heavy-duty chrome-finished case has a hinged finger loop for a sure grip. Finger pressure on the key produces an audible click that signals the count. This feature provides the assurance of a registered count without looking at the counter.

Metal construction is designed for reliability, long life, and hard use. Unique engineering provides a smooth, tactile feel. Compact unit is ideal for carrying in the pocket. Size: 44 mm diameter by 28.5 mm width,. Weight: 85 g.

Description	Cat. No.
Fisher Scientific Hand Tally Counter	07-905-6

Touch-Counter™

Cut counting time in half

Touch-Counter™ is a combination marker and digit counter designed for the lab and plant. Each time an item is touched, it is automatically marked by the felt-tip pen and counted by the built-in digital counter. Use it to count sample bottles, cell growths, and to receive/inventory/ship supplies.

One-touch operation saves time

Operation is simple: Touch an item and it is marked and counted simultaneously. Impossible to make an error, even when interrupted. Marks hold your place and counter holds your total. Durable aluminium unit has an audible click, zero reset knob, and a 9999-digit counter. Touch-Counter $^{\text{\tiny M}}$ is 177 x 50 x 38 mm length. Weight: 170 g. Spring-actuated ink reservoir valve seals felt tip when not in use and prevents ink dry-out.

Description	Cat. No.
Fisher Scientific Touch-Counter™ Supplied with black disposable pen.	07-905-1
Disposable 5-Pen Pack™ Package contains one each: black, red, blue, green, and yellow.	07-905-5









Sturdy aluminium alloy construction permits this lightweight cart to be used for loads up to 149.6 kg. Move your heaviest lab chemicals, drums, and cases of glassware with this cart.

Adjustable height

Folds up for easy storage to a compact briefcase size. Handle adjusts to two heights (685 mm and 838 mm) to accommodate all users. Platform extends for longer loads from 457 mm to 647 mm. Width is 406 mm.

Supplied bungee cords keep items from slipping. Large, solid rubber wheels make this cart extremely easy to push. Rubber bumpers on all four corners protect walls from accidental nicks. Weight: 8 kg.

Description	Cat. No.
Fisher Scientific Aluminium Fold-Up Cart	11-928-1



Aluminium Fold-Up Hand Truck

Move cartons, chemicals, and gas cylinders easily. Aluminium alloy construction allows this lightweight unit (only 6 kg) to move loads up to 99 kg. Supplied bungee cords hold materials firmly in place.

Store in a drawer

Folds to a compact size for easy storage. Height of handle is 7.1 cm (lower position) and 1 m (extended). Flip-down platform size: 355 mm wide by 241 mm. Big, smooth-rolling, solid-rubber, 165 mm diameter tires make it easy to move heavy loads.

Description	Cat. No.
Fisher Scientific Aluminium Fold-Up Hand Truck	11-928-2



Mini-Dolly Folding Cart

This is the ideal platform cart to move chemicals, carboys, computer paper, filing boxes, and scientific equipment. Eliminates lifting required by high-shelf carts. Cart ingeniously folds to a compact size for easy storage.

Easy rolling

Weighs only 907 kg, but handles up to 120 kg. Large nonskid platform (450 mm to 647 mm) holds materials firmly. Plastic guard on four sides protects your walls. Supplied elastic cords with guick hooks secure the load.

Super-glide wheels swivel for complete manoeuvrability. Easy-grip handle is 876 mm long and ensures a firm hold. Constructed of high-impact ABS plastic and chrome-plated steel for durability.

Description	Cat. No.
Fisher Scientific Mini-Dolly Folding Cart	04-681

Metric Converter

Change lab measurements to U.S. or metric in an instant with this handy workhorse

Metric Converter provides fast and accurate answers for 126 types of metric conversions. Simply enter a number, press an arrow, and read the exact metric or U.S. answer with decimal point in place. Converts length, area, volume, weight, liquid, energy, and temperature. Also performs English (Imperial) conversions and has all routine calculator functions.

Easy-to-use, easy-to-read

Raised and oversized keys make the metric converter a joy to use, even for large fingers. It has an automatic, flip-open, LCD cover that converts to a bench top stand, rubberized side grips for easy handling, and a bright and vivid 12.7 mm-high eight-digit LCD that is easy to read. The converter is ultra-lightweight, just 56 g, and has a super-compact size, only 76 x 95 x 12.7 mm—this makes it perfect for carrying in a pocket.

Description	Cat. No.
Fisher Scientific Metric Converter	12-099





Compact-Sized Metric Converter

Compact-Sized Metric Converter replaces cumbersome factor handbooks. Unit provides fast and accurate answers for 126 types of metric conversions. Simply enter a number, press an arrow, and read the exact metric or U.S. answer with decimal point in place.

Performs conversion functions

Converts length, area, volume, weight, liquid, energy, and temperature. Also performs English (Imperial) conversions and has all routine calculator functions.

Easy to use, easy to read

Raised keys, large digits (12.7 mm-high), and a bright, vivid eight-digit LCD make the metric converter easy to read and use. Ultra-lightweight, just 28.3 grams, and super-compact size, only $107 \times 12.7 \times 63$ mm, make it perfect for carrying anywhere. (battery not included)

Description	Cat. No.
Fisher Scientific Compact-Sized Metric Converter	14-648-50

Scientific Calculator

Scientific calculator performs 99% of the lab's routine and not-so-routine calculations. It does all arithmetic operations (add, subtract, multiply, divide). It performs over 50 functions, including common/hyperbolic trigonometric, logs/natural logs, powers, roots, reciprocals, factorials, percentages, hexadecimals, random number generation, and degree/decimal conversion. Statistical features include standard deviation, mean, sum of squares, sum of data, and much more. Three-key memory and forever-memory store data when the unit is off. Automatic power-down function conserves battery life. Answers are shown on a 10-digit numerical, 2-digit exponent display.

Easy-to-carry pocket size, easy-to-use raised keys

Handy pocket size makes it ideal to carry with you. Rugged case protects the unit. Raised keys make the calculator perfect for oversized fingers. Large, bright, vivid display is easy to read. Complete with instructions. Size: $127 \times 76 \times 12.7$ mm. Weight: 42.5 g.

Description	Cat. No.
Fisher Scientific Scientific Calculator	12-099-21

12-Digit Computer

Calculator displays the entire answer to 12 digits

Twelve digits end rounding errors and confusing scientific notation. Oversized, raised keys and jumbo digits (12.7 mm-high) make it easy on the fingers and eyes. Simple to use. Functions include arithmetic calculation, percent, memory, floating decimal, ratios, and grand totals. Tough ABS plastic case is drop-proof and chemical-resistant. Supplied: solar panel and battery. Size: 114 x 63 x 15.8 mm. Weight: 85 g. (battery not included)

Description	Cat. No.
Fisher Scientific 12-Digit Computer	12-099-23







Big Digit Solar-Powered Calculator

Environmentally friendly, never again buy a battery

Large digit calculator is solar-powered and saves batteries. Twelve mm-high digits allow effortless readings.

Over-sized keys and jumbo digits make it easy on the fingers and eyes. Performs all arithmetic operations (add, subtract, multiply, divide), and features memory, percent, and floating decimal point. Attractive, protective case design. Size: $107 \times 60 \times 6.3$ mm. Weight: 56 g.

Description	Cat. No.
Fisher Scientific Big Digit Solar-Powered Calculator	12-099-20



Solar Desktop Calculator

Solar Desktop unit is a big-digit desktop calculator which features arithmetic functions (add, subtract, multiply, divide), percent, 3-key memory, square root, and floating decimal point.

Solar-powered unit can be read in any light. Performs chain calculations. Digit height is 19 mm Large 8- or 12-digit display is angled to eliminate reflected glare. Oversized keys and perfect spacing are easy on the fingers. Tough ABS plastic case is ideal for rough lab use. Feet protect the unit from spills. Supplied complete with instructions. Size: 114 x 165 x 4.7 mm. Weight: 113 g.

Description	Cat. No.
Fisher Scientific Solar Desktop Calculator (8-digits)	12-099-24
Fisher Scientific Solar Desktop Calculator (12-digits) The 12-digit unit permits calculating numbers as large as 999,999,999,999 and a small as .000000000001 without confusing scientific power notations or symbol	



Clipboard/Calculator with Traceable® Timer



Perfect for keeping notes

Clip securely holds forms, notes, and schedules. Attached pen is always at the ready. Opening in back allows unit to be hung on the wall. Eight-digit, solar-powered calculator performs 99% of the lab's routine calculations. Functions are: add, subtract, multiply, divide, chain calculation, constants, powers, reciprocal values, percent calculations, square root, and memory.

Two models

Supplied as two different models, one with a quartz-crystal accurate Traceable® timer, and the other with a retractable tape measure (60 inches and 150 centimetres). Timer model may be programmed in the countdown mode, in one-second increments, from 100 hours to 1 second. At zero, a loud-beeping alarm sounds for 60 seconds or may be silenced manually. In the stopwatch mode, it times from 1 second to 99 hours. Also has a time-out feature in both up and down counting. Big-digit, 8.3 mm-high display is easy to read. Operation is quick and intuitive (no need to ever read the instructions). To assure accuracy an individually serial-numbered Traceable® Certificate is provided for timing. It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Size: 355 x 228 mm. Weight: 311 g.

Description	Cat. No.
Fisher Scientific Clipboard with Calculator and Traceable® Timer	14-648-230
Fisher Scientific Clipboard with Calculator with Measuring Tape	14-648-100



Traceable® Digital Callipers



Designed for the lab

Traceable® Callipers make length/diameter measurements three ways—outside, inside, and depth. Measures to 200 mm. At the touch of a key units switch from inches to millimeters.

Zeroes at any point

Key instantly sets unit to zero when jaws are at any position. This permits, without calculations, setting a Floating Zero™ or reference point to read "greater than or less than results with a minus sign displayed". Ergonomic design precision callipers are ideal for measuring the outside diameter of stoppers, the inside diameter of tubing, and the depth of vials. Depth bar extends from the end of calliper. Fine adjustment thumb roller improves reading speeds and position-holding lock screw sets length. Easy-to-read jumbo digital display is 8.3 mm-high. No lubrication is ever required on the ultra-smooth slide bar. Runs on the supplied battery for 10,000 hours. Made of durable acid-resistant, hardened stainless-steel or strong, composite carbon fibre. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology).

Traceable® Digital Calliper Specifications Chart							
Cat. No.	14-648-17	06-664-16	15-077-957	15-077-958			
Material	Stainless-steel		Carbon Fibre				
Measuring range	6"/150mm	8"/200mm	4"/100mm	6"/150mm			
Resolution	0.0005 inch/0.01mm		0.01 inch/0.1mm				
Accuracy	±0.001 inch or ±0.03mm		±0.01 inch or ±0.2mm				
Depth Bar	Yes		No				
Thumb roller/Lock screw	Yes		No				
Non-metallic/non-conductive	No		Yes				
Traceable® Certificate	Yes		Yes				
Dimensions	228 x 76 mm	279 x 76 mm	177 x 63 mm	241 x 76 mm			
Weight	141 g	170 g	28 g	56 g			



Traceable® SpatulaBalance™



Unique spatula both scoops material and instantly displays weight. Balance with digital display is located in the easy-grip handle. The weighing range is 0 to 300.0 grams and 0 to 10.580 ounces. Readability is 0.1 gram and 0.005 ounce. Level position repeatability is 0.1 gram and accuracy is ± 0.2 g or 0.25%. Three position soft-touch keys in the handle tares (sets to zero), hold (freezes the display), and changes grams/ounces. LCD indicates low battery.

Scoop design eliminates spilling

Markings on see-through scoop are graduated from 5 to 30 millilitres in 5 millilitre increments for weighing liquids with ease. Scoop detaches from balance for effortless dishwasher-safe cleaning. Chemical/corrosion-resistant ABS plastic construction allows transferring materials without sticking. SpatulaBalance™ transfers and weighs crystals, granulated material, solids, liquids, precipitates, and chemicals.

To assure accuracy an individually serial-numbered Traceable® Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA (A2LA, UKAS, and NABL calibration certificates are all mutually recognised). It indicates traceability to standards provided by NIST (National Institute of Standards and Technology). Supplied: two batteries for over a year of usage. Scoop holds 32 millilitres/1.1 fluid ounces and scoop volume is 32 cubic centimetres/1.95 cubic inches. Size: 228 x 50 x 25.4 mm. Weight: 85 g.

Description	Cat. No.
Fisher Scientific Traceable® SpatulaBalance™	14-648-231



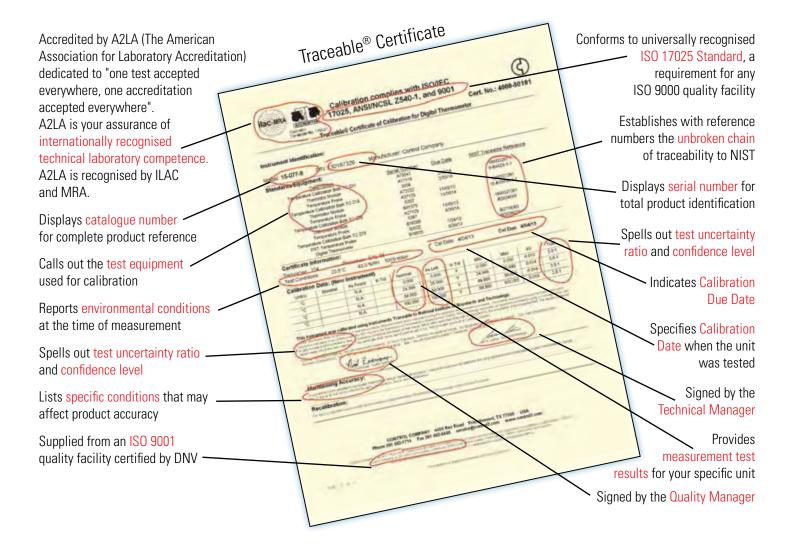
Traceable® Certificate assures accurate lab tests

All Traceable® products are provided with a Traceable® Calibration Certificate from an ISO 17025 calibration laboratory. Thermometer, timer, and humidity certificates are accredited by the American Association for Laboratory Accreditation (A2LA).

A2LA is widely recognised internationally through bilateral and multilateral agreements and through its participation in the International Laboratory Accreditation (ILAC) and Multilateral Recognition Arrangement (MRA). Through A2LA Accreditation, Traceable® Certificates are internationally recognised by Accreditation Agencies and Services in over 75 countries throughout Europe, the Middle East, North America, South America, Asia, and Africa.

Traceable® Certificate indicates the product is traceable to standards provided by the National Institute of Standards and Technology (NIST), a U.S. Government agency within the Commerce Department. The Traceable® Certificate complies with ANSI/NCSL Z540-1.

All products are provided from an ISO 9001 Quality Certified Company. This quality certification provides users with the assurance that they receive only the finest and most reliable products. It is worldwide recognition of superb quality for innovative electronic products. ISO 9001 Certification insures that every product is checked and rechecked to provide for absolutely the highest quality. All products are produced under ISO 9001 and certified by DNV (Det Norske Veritas.)



Traceable® Products

Products supplied with a Traceable® Calibration Certificate

