



Bench meters

# Rapid and consistent laboratory results

Eutech 1700 Series Bench Meters



Durable and reliable  
instruments for consistent  
testing and measurement



## For more than 30 years,

Thermo Scientific™ Eutech™ instruments have helped scientists and technicians with water quality analysis. Eutech instruments pioneered the inclusion of application-specific integrated circuits (ASIC) and are internationally recognised for their achievements in sensor technology, software programming and product design. The result is a unique line of products that are accurate, consistent, reliable and easy to use.

Driven by a successful total customer satisfaction program in the ISO9001:2000 Quality System, all products undergo extensive testing and calibration by a qualified team of technical experts. Stringent quality control measures help ensure consistency, durability and performance. Additionally, Eutech water analysis instruments, electrodes and solutions are certified to comply with various global testing standards.

Every Eutech innovation is conceptualised with the user in mind. This, coupled with our strategic location in the design and technology hub of Asia, has enabled the production of cutting-edge instruments at competitive prices.

Learn more about Eutech instruments at [thermofisher.com/eutech](https://thermofisher.com/eutech).



**Eutech**

# 1710 pH/mV Bench Meter

## Simplify your pH and redox sample measurements

- The large, bright backlit display makes it easy to read and record sample measurements
- The meter's small footprint helps reduce the amount of required bench space
- Critical data is automatically saved to the 500-point meter data log and can be exported via the meter's communication port to a computer or printer
- The meter's non-volatile meter memory preserves settings and data in the event of power loss
- On-screen icons indicate measurement stability status to support confidence in your readings
- All meters allow for automatic or manual temperature compensation and a one-point offset ATC temperature probe calibration



## Features and benefits

- Simultaneously read pH, mV and temperature
- Measure  $-2.00$  to  $18.00$  pH,  $\pm 2000.0$  mV,  $-5.0$  to  $105.0^{\circ}\text{C}$
- Perform one- to five-point pH calibrations
- Calibrate using automatic buffer recognition or manual entry
- Perform one-point relative mV calibration (RmV)
- Monitor pH electrode status with the electrode condition icon
- View pH, RmV and temperature calibration logs with date and time stamps
- All data and calibration logs are date and time stamped for GLP/GMP reporting
- Help facilitate electrode movement into and out of samples with the meter-attached stand

*Meter is guaranteed against manufacturing defects for three years from the purchase date.*



## Eutech 1710 pH/mV Bench Meter Models

| Description  | Cat. No.   |
|--|------------|
| Eutech 1710 pH/mV bench meter with stand, PC cable and 100 to 240 V universal power adapter  | EBPH171000 |
| Eutech 1710 pH/mV bench meter kit with gel-filled plastic-body pH/ATC electrode, solutions, stand, PC cable and power adapter                        | EBPH171001 |
| Eutech 1710 pH/mV bench meter kit with refillable plastic-body double junction pH electrode, ATC probe, solutions, stand, PC cable and power adapter | EBPH171002 |
| Eutech 1710 pH/mV bench meter kit with gel-filled plastic-body double junction pH electrode, ATC probe, solutions, stand, PC cable and power adapter | EBPH171003 |
| Eutech 1710 pH/mV bench meter kit with refillable glass-body double junction pH electrode, ATC probe, solutions, stand, PC cable and power adapter   | EBPH171004 |

Electrode and accessory information can be found on pages 11–15 of this brochure and at [thermofisher.com/eutech](http://thermofisher.com/eutech).

**Eutech**

# 1720 Conductivity Bench Meter

**Streamline your conductivity, salinity and total dissolved solids (TDS) sample measurements**

- The large, bright backlit display makes it easy to read and record sample measurements
- The meter's small footprint helps reduce the amount of required bench space
- Critical data is automatically saved to the 500-point meter data log and can be exported via the meter's communication port to a computer or printer
- The meter's non-volatile meter memory preserves settings and data in the event of power loss
- On-screen icons indicate measurement stability status to support confidence in your readings
- All meters allow for automatic or manual temperature compensation and a one-point offset ATC temperature probe calibration



## Features and benefits

- Simultaneously read conductivity, salinity or TDS with temperature measurements
- Measure 0.00  $\mu\text{S}$  to 500.0 mS conductivity, 0.00 to 80.0 ppt salinity, 0.00 ppm to 500.0 ppt TDS, and  $-5.0$  to  $105.0^\circ\text{C}$
- Perform one- to five-point conductivity calibrations
- Calibrate using automatic standard recognition or manual entry
- Perform one-point salinity and one- to five-point TDS calibrations
- View conductivity, salinity, TDS and temperature calibration logs with date and time stamps
- All data logs and calibration logs are date and time stamped for GLP/GMP reporting
- Help facilitate electrode movement into and out of samples with the meter-attached stand

*Meter is guaranteed against manufacturing defects for three years from the purchase date.*



## Eutech 1720 Conductivity Bench Meter Models

| Description  | Cat. No.   |
|--|------------|
| Eutech 1720 conductivity/salinity/TDS bench meter with stand, PC cable and 100 to 240V universal power adapter                           | EBEC172000 |
| Eutech 1720 conductivity/salinity/TDS bench meter kit with two-cell conductivity/ATC probe, solutions, stand, PC cable and power adapter | EBEC172001 |

Electrode and accessory information can be found on pages 11–15 of this brochure and at [thermofisher.com/eutech](http://thermofisher.com/eutech).



**Eutech**

# 1730 Dissolved Oxygen Meter

**Take your dissolved oxygen sample measurements with ease**

- The large, bright backlit display makes it easy to read and record sample measurements
- The meter's small footprint helps reduce the amount of required bench space
- Critical data is automatically saved to the 500-point meter data log and can be exported via the meter's communication port to a computer or printer
- The meter's non-volatile meter memory preserves settings and data in the event of power loss
- On-screen icons indicate measurement stability status to support confidence in your readings
- All meters allow for automatic or manual temperature compensation and a one-point offset ATC temperature probe calibration





## Features and benefits

- Simultaneously read dissolved oxygen and temperature measurements
- Measure 0.0 to 300.0% saturation, 0.00 to 30.0 mg/L or ppm concentrations, and -5.0 to 105.0°C
- Perform 100% and 0% saturation calibrations or a one-point concentration calibration using a custom value (Winkler)
- Use automatic barometric pressure compensation for dissolved oxygen measurements with value entry in mmHg or bar
- Use automatic salinity compensation for dissolved oxygen measurements with a value entry of 0.0 to 50.0 ppt
- View dissolved oxygen and temperature calibration logs with date and time stamps
- All data logs and calibration logs are date and time stamped for GLP/GMP reporting
- Help facilitate electrode movement into and out of samples with the meter-attached stand



*Meter is guaranteed against manufacturing defects for three years from the purchase date.*

## Eutech 1730 Dissolved Oxygen Meter Models

| Description  | Cat. No.   |
|--|------------|
| Eutech 1730 dissolved oxygen bench meter with stand, PC cable and 100 to 240V universal power adapter                            | EBDX173000 |
| Eutech 1730 dissolved oxygen bench meter kit with galvanic DO/ATC probe, stand, PC cable and 100 to 240V universal power adapter | EBDX173001 |

Electrode and accessory information can be found on pages 11–15 of this brochure and at [thermofisher.com/eutech](http://thermofisher.com/eutech).

## Thermo Scientific Eutech 1700 Series Laboratory Meter Specification Table

|                         | Specification                    | Eutech 1710 pH/mV Meter   | Eutech 1720 Conductivity Meter              | Eutech 1730 Dissolved Oxygen Meter                 |  |
|-------------------------|----------------------------------|---|---|--|--|
| <b>pH</b>               | Range                            | -2.00 to 18.00 pH   |   |  |  |
|                         | Resolution                       | 0.1, 0.01 pH  |   |  |  |
|                         | Relative accuracy                | ±0.01 pH ±1 LSD   |   |  |  |
|                         | Calibration points               | 1 to 5 points   |   |  |  |
|                         | Automatic buffer sets            | USA (pH 1.68, 4.01, 7.00, 10.01, 12.45),<br>NIST (pH 1.68, 4.01, 6.86, 9.18, 12.45) |   |  |  |
| <b>mV/RmV</b>           | Range                            | ±2000.0 mV  |   |  |  |
|                         | Resolution                       | 0.1 mV  |   |  |  |
|                         | Relative accuracy                | ±0.2 mV or ±0.05% of reading, whichever is greater                                  |   |  |  |
|                         | Calibration point                | 1 point   |   |  |  |
| <b>Conductivity</b>     | Range                            |   | 0.00 µS to 500.0 mS                         |  |  |
|                         | Resolution                       |   | 0.01, 0.1, 1 µS; 0.01, 0.1 mS               |  |  |
|                         | Relative accuracy                |   | ±0.5% reading ±1 LSD                        |  |  |
|                         | Calibration points               |   | 1 to 5 points                               |  |  |
|                         | Temperature compensation         |   | Linear (0 to 10 %/°C) or off                |  |  |
|                         | Normalization temperature        |   | 15.0, 20.0, 25.0 or 30.0°C                  |  |  |
| <b>TDS</b>              | Range                            |   | 0.00 ppm to 500.0 ppt (TDS factor of 1.00)  |  |  |
|                         | Resolution                       |   | 0.01, 0.1, 1 ppm; 0.01, 0.1 ppt             |  |  |
|                         | Relative accuracy                |   | ±0.5% reading ±1 LSD                        |  |  |
|                         | Calibration points               |   | 1 to 5 points                               |  |  |
|                         | TDS factor                       |   | 0.40 to 1.00                                |  |  |
| <b>Salinity</b>         | Range                            |   | 0.00 to 80.0 ppt                            |  |  |
|                         | Resolution                       |   | 0.01, 0.1 ppt                               |  |  |
|                         | Relative accuracy                |   | ±0.5% reading ±1 LSD                        |  |  |
|                         | Calibration points               |   | 1 point                                     |  |  |
| <b>Dissolved oxygen</b> | Range                            |   |   | 0.0 to 300.0% saturation; 0.00 to 30.0 mg/L or ppm |  |
|                         | Resolution                       |   |   | 0.1, 1% saturation; 0.01, 0.1 mg/L or ppm          |  |
|                         | Relative accuracy                |   |   | ±2% saturation; ±0.2 mg/L or ppm                   |  |
|                         | Calibration types                |   |   | 100% and 0% saturation; custom concentration value |  |
|                         | Barometric pressure compensation |   |   | 400.0 to 850.0 mmHg; 0.53 to 1.13 bar              |  |
|                         | Salinity compensation            |   |   | 0.0 to 50.0 ppt                                    |  |
| <b>Temperature</b>      | Range                            |   | -5.0 to 105.0°C                             |  |  |
|                         | Resolution                       |   | 0.1°C                                       |  |  |
|                         | Relative accuracy                |   | ±0.3°C                                      |  |  |
|                         | Input                            |   | Manual or automatic with ATC probe          |  |  |
|                         | Calibration points               |   | 1 point, ±5.0°C                             |  |  |
| <b>Meter features</b>   | Display                          |   | 5 in. segmented LCD with backlight          |  |  |
|                         | Date and time                    |   | Yes   |  |  |
|                         | Read types                       |   | Continuous, auto-read, timed                |  |  |
|                         | Data log points                  |   | Up to 500                                   |  |  |
|                         | Calibration log                  | pH, RmV and temperature   | Conductivity, TDS, salinity and temperature | Dissolved oxygen and temperature                   |  |
|                         | Data output                      |   | Computer or printer                         |  |  |
|                         | Calibration due alarm            |   | 1 to 168 hours or off                       |  |  |
|                         | Alarms                           |   | Visual and on/off audible                   |  |  |
|                         | Memory                           |   | Non-volatile                                |  |  |
|                         | Warranty                         |   | 3 years                                     |  |  |

## Eutech accessories, electrodes and solutions

Customise your meter with electrodes and solutions that meet your exact testing needs



## Thermo Scientific Eutech 1700 Series Laboratory Meter Accessories

Find the right accessories for your workflow.

| Description   | Uses  | Cat. No.    |
|---|---|-------------|
| Meter-attached electrode stand                                  | Replace your electrode stand as needed  | EB1700ARM   |
| Universal power supply, 100 to 240V                             | Replace your power adapter as needed  | EB1700PWR   |
| USB computer cable  | Replace your computer cable as needed   | EB1700USB   |
| Meter dust cover  | Protect your meter from dust and debris while in storage  | EB1700CVR   |
| Compact thermal printer with RS232 cable and paper, 100 to 240V | Print data from your meter to document and retain records   | 01X594301   |
| RS232 cable for thermal printer                                 | Replace your printer cable as needed  | 30X427301   |
| Paper for thermal printer, 2 pack                               | Replace your printer paper as needed  | 01X594401   |
| Precision pH/mV simulator with BNC-to-BNC cable                 | Check pH/mV meter function independent of an electrode – compatible with Eutech 1710 pH/mV Bench Meter only | PHSIMULATOR |

## Eutech pH and ORP Electrodes

For use with Eutech 1710 pH/mV Bench Meters.

| Description  | Range             | Material        | Junction   | Fill Type           | Temperature Range | Dimensions  | Cable, Connector         | Cat. No.      |
|--|-------------------|-----------------|--|---------------------|-------------------|-------------|--------------------------|---------------|
| General Purpose Refillable Combination pH Electrode                | 0 to 13 pH        | Glass           | Single junction, ceramic   | Refillable, ECRE001 | 0 to 100°C        | 130 x 12 mm | 1m, BNC                  | ECFG7350401B  |
| General Purpose Refillable Combination pH Electrode, Sleeve Design | 0 to 13 pH        | Glass           | Single junction, sleeve design for faster response in high viscosity solutions | Refillable, ECRE001 | 0 to 100°C        | 110 x 12 mm | 1m, BNC                  | ECFG7351101B  |
| Double Junction Combination pH Electrode                           | 0 to 13 pH        | Glass           | Double junction, ceramic   | Refillable, ECRE002 | 0 to 100°C        | 110 x 12 mm | 1m, BNC                  | ECFG7370101B  |
| Spear Tip Double Junction Combination pH Electrode                 | 2 to 11 pH        | Glass           | Double junction, open pore, suitable for semi-solid samples                    | Sealed, polymer-gel | 0 to 50°C         | 80 x 6 mm   | 1m, BNC                  | EC620133      |
| General Purpose Combination pH Electrode, Open Pore                | 0 to 13 pH        | Plastic         | Single junction, porous HDPE pin   | Sealed, gel-filled  | 0 to 80°C         | 90 x 12 mm  | 1m, BNC                  | ECFC7252101B  |
| Double Junction Combination pH Electrode                           | 0 to 13 pH        | Plastic         | Double junction, porous HDPE pin   | Sealed, gel-filled  | 0 to 80°C         | 90 x 12 mm  | 1m, BNC                  | ECFC7252201B  |
| General Purpose Refillable Combination pH Electrode                | 0 to 13 pH        | Plastic         | Single junction, porous HDPE pin   | Refillable, ECRE001 | 0 to 80°C         | 90 x 12 mm  | 1m, BNC                  | ECFC72521R01B |
| Double Junction Refillable Combination pH Electrode                | 0 to 13 pH        | Plastic         | Double junction, porous HDPE pin   | Refillable, ECRE002 | 0 to 80°C         | 90 x 12 mm  | 1m, BNC                  | ECFC72522R01B |
| General Purpose 3-in-1 pH/Temperature Electrode                    | 0 to 13 pH        | Plastic         | Single junction, porous HDPE pin   | Sealed, gel-filled  | 0 to 80°C         | 90 x 12 mm  | 1m, BNC and 2.5 mm phono | ECFC7352901B  |
| Temperature Electrode  | –                 | Stainless steel | –  | –                   | 0 to 100°C        | 117 x 3 mm  | 1m, 2.5 mm phono         | PH5TEMB01P    |
| General Purpose ORP Electrode                                      | –1000 to +1000 mV | Plastic         | Double junction, platinum pin  | Sealed, gel-filled  | 0 to 80°C         | 90 x 12 mm  | 1m, BNC connector        | ECFC7960201B  |



## Conductivity Probes

For use with Eutech 1720 Conductivity Bench Meters.

| Description                           | Range                | Material                                     | Temperature Range | Dimensions  | Cable          | Cat. No.    |
|---------------------------------------|----------------------|--|-------------------|-------------|----------------|-------------|
| 2-Electrode Conductivity/<br>ATC Cell | 0 to 150 mS, K=1.0   | Stainless steel rings,<br>PP and Ultem™ body | 0 to 80°C         | 144 x 16 mm | 1 m, 8-pin DIN | CONSEN9501D |
| 2-Electrode Conductivity/<br>ATC Cell | <200 µS, K=0.1       | Stainless steel rings,<br>epoxy body         | 0 to 80°C         | 115 x 12 mm | 1 m, 8-pin DIN | 93X546101   |
| 4-Electrode Conductivity/<br>ATC Cell | 0 to 350 mS, K=0.530 | Graphite with epoxy body                     | 0 to 100°C        | 120 x 12 mm | 1 m, 8-pin DIN | CONSEN9201D |

## Eutech Dissolved Oxygen Probes

For use with Eutech 1730 Dissolved Oxygen Bench Meters.

| Description                             | Range        | Material                                    | Temperature Range | Dimensions   | Cable                          | Cat. No. |
|---|--------------|---|-------------------|--------------|--------------------------------|----------|
| Galvanic Dissolved Oxygen/<br>ATC Probe | 0 to 20 mg/L | Stainless steel rings, PP<br>and Ultem body | 0 to 50°C         | 78 x 16.5 mm | 0.9 m, BNC and<br>2.5 mm phono | DO6HANDY |



## Eutech pH and ORP Solutions

| Description   | Cat. No.      |
|---|---------------|
| pH 1.68 buffer, colourless, 480 mL                                  | ECBU1BT       |
| pH 4.01 buffer, colourless, 480 mL                                  | ECBU4BT       |
| pH 4.01 buffer, red coloured, 1 L                                   | ECBU4BTC1LIT  |
| pH 4.01 buffer, red coloured, 480 mL                                | ECBU4BTC      |
| pH 4.0 buffer, red coloured, 60 mL                                  | 01X608001     |
| pH 4.01 buffer sachets, 20 x 20 mL                                  | ECBU4BS       |
| pH 6.86 buffer, colourless, 480 mL                                  | ECBU686BT     |
| pH 7.00 buffer, colourless, 480 mL                                  | ECBU7BT       |
| pH 7.00 buffer, yellow coloured, 1 L                                | ECBU7BTC1LIT  |
| pH 7.00 buffer, yellow coloured, 480 mL                             | ECBU7BTC      |
| pH 7.00 buffer, yellow coloured, 60 mL                              | 01X607901     |
| pH 7.00 buffer sachets, 20 x 20 mL                                  | ECBU7BS       |
| pH 9.00 buffer, colourless, 480 mL                                  | ECBU9BT       |
| pH 9.18 buffer, colourless, 480 mL                                  | ECBU918BT     |
| pH 10.01 buffer, blue coloured, 1 L                                 | ECBU10BTC1LIT |
| pH 10.01 buffer, blue coloured, 480 mL                              | ECBU10BTC     |
| pH 10.01 buffer, colourless, 480 mL                                 | ECBU10BT      |
| pH 10.0 buffer, blue coloured, 60 mL                                | 01X608101     |
| pH 10.01 buffer sachets, 20 x 20 mL                                 | ECBU10BS      |
| pH 12.45 buffer, colourless, 480 mL                                 | ECBU12BT      |
| pH 4, 7, 10 buffer set, colourless, 480 mL each                     | ECPHBUFKIT    |
| pH 4, 7, 10 buffer set, coloured, 480 mL each                       | ECPHBUFKITC   |
| Deionised water rinse sachets                                       | ECRINWT       |
| Storage solution for pH electrode, 480 mL                           | ECRE005       |
| Storage solution for EC620130 pH electrode, 500 mL                  | ECRE006       |
| Protein cleaning solution for pH electrode, 480 mL                  | ECDPCBT       |
| Single junction pH and ORP electrode fill solution, 480 mL          | ECRE001       |
| Double junction pH and ORP electrode fill solution, 480 mL          | ECRE002       |
| ORP pre-treatment solution (475 mV), 480 mL                         | ECORPPRE      |
| ORP standard, quinhydrone 263 (263 mV, $\pm 30$ mV at 25°C), 480 mL | ECORPQUIN     |
| ORP standard, quinhydrone 86 (86 mV, $\pm 30$ mV at 25°C), 480 mL   | ECORPQUIN086  |



## Eutech Conductivity, TDS and Salinity Solutions

| Parameter                                     | Description   | Cat. No.     |
|---|---|--------------|
| Conductivity Standard Solutions               | 10 µS/cm KCl conductivity standard sachets, 20 x 20 mL                | ECCON10BS    |
|   | 84 µS/cm KCl conductivity standard, 480 mL                            | ECCON84BT    |
|   | 84 µS/cm KCl conductivity standard, 60 mL                             | 01X609201    |
|   | 100 µS/cm KCl conductivity standard, 480 mL                           | ECCON100BT   |
|   | 447 µS/cm KCl conductivity standard sachets, 20 x 20 mL               | ECCON447BS   |
|   | 500 µS/cm KCl conductivity standard, 480 mL                           | ECCON500BT   |
|   | 1,413 µS/cm KCl conductivity standard, 480 mL                         | ECCON1413BT  |
|   | 1,413 µS/cm KCl conductivity standard, 60 mL                          | 01X608301    |
|   | 1,413 µS/cm KCl conductivity standard sachets, 20 x 20 mL             | ECCON1413BS  |
|   | 2,764 µS/cm KCl conductivity standard, 480 mL                         | ECCON2764BT  |
|   | 2,764 µS/cm KCl conductivity standard sachets, 20 x 20 mL             | ECCON2764BS  |
|   | 5.0 mS/cm KCl conductivity standard, 480 mL                           | ECCON5000BT  |
|   | 12.88 mS/cm KCl conductivity standard, 480 mL                         | ECCON1288BT  |
|   | 15,000 µS/cm (15 mS/cm) KCl conductivity standard sachets, 20 x 20 mL | ECCON15000BS |
| 111.8 mS/cm KCl conductivity standard, 480 mL | ECCON1118BT   |              |
| TDS Standard Solutions                        | 50 ppm 442 TDS standard, 480 mL                                       | EC44250BT    |
|   | 300 ppm 442 TDS standard, 480 mL                                      | EC442300BT   |
|   | 1,000 ppm 442 TDS standard, 480 mL                                    | EC4421000BT  |
|   | 3,000 ppm 442 TDS standard, 480 mL                                    | EC4423000BT  |
| Salinity Standard Solutions                   | 5 ppt NaCl salinity standard, 480 mL                                  | ECNACL5PPT   |
|   | 25 ppt NaCl salinity standard, 480 mL                                 | ECNACL25PPT  |
|   | 45 ppt NaCl salinity standard, 480 mL                                 | ECNACL45PPT  |
|   | 3,000 ppm KCl salinity standard sachets, 20 x 20 mL                   | ECCON3000BS  |

## Eutech Dissolved Oxygen Solution

| Parameter                  | Description                                       | Cat. No.     |
|----------------------------|---|--------------|
| Dissolved Oxygen Solutions | Zero oxygen solution, 0% dissolved oxygen, 480 mL | ECDOZEROSOLN |



Learn more at [thermofisher.com/eutech](https://thermofisher.com/eutech)

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