



## Portable Conductivity/Resistivity/TDS/Salinity Meter

### CDH-287-KIT



- ✓ 6 Conductivity Ranges
- ✓ 2 Resistivity Ranges
- ✓ 5 TDS Ranges
- ✓ Practical Salinity in the Range of 2 to 42.0, in Accordance with UNESCO Data
- ✓ Programmable Temperature Coefficient
- ✓ Microprocessor-Based
- ✓ Easy to Operate
- ✓ Ideal for Most Water Applications

The CDH-287 is a portable, multi-ranging conductivity meter with unsurpassed accuracy and reliability in the field. It also measures resistivity, total dissolved solids and practical salinity, making the CDH-287 the most versatile meter on the market. It comes with a glass, dip-style conductivity probe with an integral temperature sensor and cell constant of 1.0. This microprocessor-based conductivity meter features auto-ranging, programmable temperature coefficient and error diagnostics. Simply pressing the keypad switches from conductivity to TDS, resistivity or salinity units. A concentration mode allows operators to choose their own concentration units and create a specific calibration curve, by measuring up to four concentration standards and inputting the values.

To increase range accuracy, cells are also available with constants of K=0.1 and K=10. Dip cells and flow cells are available in both glass and epoxy body styles.

### Specifications

#### Conductivity

##### Ranges:

0.00 to 19.99  $\mu\text{S}/\text{cm}$  or 1.999  $\text{mS}/\text{cm}$   
 0.00 to 199.9  $\mu\text{S}/\text{cm}$  or 19.99  $\text{mS}/\text{cm}$   
 0000 to 1999  $\mu\text{S}/\text{cm}$  or 199.9  $\text{mS}/\text{cm}$   
 0.00 to 19.99  $\text{mS}/\text{cm}$  or 1999  $\text{mS}/\text{m}$   
 00.0 to 199.9  $\text{mS}/\text{cm}$  or 19.99  $\text{mS}/\text{m}$   
 000 to 1999  $\text{mS}/\text{cm}$  or 199.9  $\text{mS}/\text{m}$

**Accuracy:**  $\pm 0.3\%$  rdg

##### Temperature Compensation:

Automatic, 0 to 50°C (32 to 212°F)

#### Total Dissolved Solids

##### Ranges:

0 to 19.99  $\text{mg}/\text{L}$ , 0 to 199.9  $\text{mg}/\text{L}$   
 0 to 1999  $\text{mg}/\text{L}$ , 0 to 1.999  $\text{g}/\text{L}$   
 0 to 19.99  $\text{g}/\text{L}$ , 0 to 132.0  $\text{g}/\text{L}$

**Accuracy:**  $\pm 0.3\%$  rdg

#### Resistivity

##### Ranges:

0 to 1.999  $\text{M}\Omega/\text{cm}$  or 0.019  $\text{M}\Omega/\text{m}$   
 0 to 19.99  $\text{M}\Omega/\text{cm}$  or 0.199  $\text{M}\Omega/\text{m}$

**Accuracy:**  $\pm 0.3\%$  of reading

#### Salinity

**Range:** 2.0 to 42.0% salinity; automatic conversion from conductivity, using temperature relationship for seawater, in accordance with UNESCO, IASPO data

**Accuracy:**  $\pm 0.3\%$  rdg

**Temperature Compensation:** Automatic, -2.0 to 35°C (28.4 to 95°F)

#### Concentration

**Range:** 0 to 9999, automatic ranging, choice of units, background offset function

**Calibration:** 4 point straight line interpolation

#### Temperature

**Range:** -30.0 to 130.0°C (-22.0 to 266.0°F)

**Accuracy:**  $\pm 0.3^\circ\text{C}$  (0.5°F)

### General Specifications

**Reference Temperature:** 25°C (77°F), selectable to 20°C (68°F)

**Temperature Coefficient:** Preset to 2%/°C; programmable from 0 to 5%/°C

**Measurement Frequency:** 3000 Hz

**Recorder Output:**  $\pm 200.0$  mV

#### RS232

**Display:** 12.7 mm (0.5") LCD

**Dimensions:** 100 L x 180 W x 44 mm D (3.9 x 7.1 x 1.7")

**Cable:** 1.2 m (3.9')

**Weight:** 410 g (0.9 lb)

**Power:** 9V battery (included)





CDH-287-KIT is supplied with meter, glass dip-style conductivity probe with integral temperature sensor and cell constant of 1.0, sample bottle, calibration solution, rugged carrying case and operator's manual.

## To Order

| Model No.            | Description   |
|----------------------|---|
| <b>CDH-287-KIT</b>   | Conductivity/resistivity/TDS/salinity meter, glass dip-style conductivity probe with integral temperature sensor, K = 1.0, carrying case, sample bottle, 9V battery, calibration solution |
| <b>CDE-5001-GDI</b>  | Replacement conductivity probe, glass dip-style, K=1.0 with ATC, platinum plates, 12 x 130 mm (0.47 x 5.1")   |
| <b>CDE-5002-PD1</b>  | Polymer dip-style probe, K = 1.0 with ATC, platinum plates, 12 x 130 mm (0.47 x 5.1")   |
| <b>CDE-5004-ED10</b> | Epoxy dip-style probe, K = 10 with ATC, carbon plates, 26 x 353 mm (1.0 x 13.9")  |
| <b>CDE-5005-GF1</b>  | Glass flow cell, K = 1.0 with ATC, platinum plates, 13 x 166 mm (0.5 x 6.5") overall length, 5 mm (0.2") tubing connections, 33 mm (1.3") cell head, 4 mL minimum volume                  |
| <b>CDE-5008-EF10</b> | Epoxy flow cell, K = 10 with ATC, carbon plates, 26 x 203 mm (1.0 x 8.0") with 10.5 mm (0.4") tubing connections, 353 mm (13.9") overall length, 13 mL volume                             |
| <b>CDE-5010-ED1</b>  | Epoxy dip-style probe, K = 1 with ATC, carbon plates, 26 x 250 mm (1.0 x 9.8")  |
| <b>CDE-5011-ED01</b> | Epoxy dip-style probe, K = 0.1 with ATC, carbon plates, 26 x 216 mm (1.0 x 8.5")  |
| <b>CDE-5012-EF1</b>  | Epoxy flow cell, K = 1.0 with ATC, carbon plates, 26 x 100 mm (1.0 x 3.9") with 10.5 mm (0.4") tubing connections, 250 mm (9.8") overall length, 26 mL volume                             |
| <b>CDE-5013-EF01</b> | Epoxy flow cell, K = 0.1 with ATC, carbon plates, 26 x 66 mm (1.0 x 2.6") with 10.5 mm (0.4") tubing connections, 216 mm (8.5") overall length, 12 mL volume                              |
| <b>CDE-5014-GD01</b> | Glass dip-style probe, K = 0.1 with ATC, platinum plates, 20 x 130 mm (0.8 x 5.1")  |
| <b>CDE-5019-ED1</b>  | Epoxy dip-style probe, K = 1.0 with ATC, carbon plates, 12 x 110 mm (0.5 x 4.3")  |
| <b>MN1604</b>        | 3 Replacement 9V battery  |

CDH-287-KIT is supplied with meter, glass dip-style conductivity probe with integral temperature sensor and cell constant of 1.0, sample bottle, 9V battery, calibration solution, rugged carrying case and operator's manual.

**Ordering Examples:** CDH-287-KIT, meter and accessories, plus CDE-5008-EF10, epoxy flow cell.

CDH-287-KIT, meter and accessories, plus CDE-5011-ED01, 0.1 cell constant probe.

| Cell Constant | Measuring Range                               | Typical Applications   |
|---------------|---|--|
| <b>0.1</b>    | >100 $\mu$ S (platinum) >200 $\mu$ S (carbon) | Pure demineralized, distilled or boiler-fed water                                |
| <b>1.0</b>    | 100 $\mu$ S to 100 mS                         | Surface or wastewater-diluted salt solutions, fertilizers, electroplating rinses |
| <b>10</b>     | Over 100 mS                                   | Concentrated salt solutions, sea water   |

**Note:** Carbon (Graphite) probes are easier to clean and are recommended when suspended solids are present.