

# Quick Reference Guide

HI98192

## USP Compliant EC, TDS, NaCl, Resistivity, Temperature Meter

### SPECIFICATIONS

#### • RANGE

EC	0.001 to 9.999 $\mu\text{S}/\text{cm}^*$ , 10.00 to 99.99 $\mu\text{S}/\text{cm}$ , 100.0 to 999.9 $\mu\text{S}/\text{cm}$ , 1.000 to 9.999 $\text{mS}/\text{cm}$ , 10.00 to 99.99 $\text{mS}/\text{cm}$ , 100.0 to 1000.0 $\text{mS}/\text{cm}$ Actual conductivity 1000.0 $\text{mS}/\text{cm}$ 0 to 400 $\text{mS}/\text{cm}$ (Shows values up to 1000.0 $\text{mS}/\text{cm}$ )
Resistivity	1.0 to 99.9 $\Omega\cdot\text{cm}$ , 100 to 999 $\Omega\cdot\text{cm}$ , 1.00 to 99.9 $\text{K}\Omega\cdot\text{cm}$ , 10.0 99.9 $\text{K}\Omega\cdot\text{cm}$ , 100 to 999 $\text{K}\Omega\cdot\text{cm}$ , 1.00 to 9.99 $\text{M}\Omega\cdot\text{cm}$ , 10.0 to 100.0 $\text{M}\Omega\cdot\text{cm}^*$
TDS	0.00 to 99.99 ppm 100.0 to 999.9 ppm 1.000 to 9.999 g/L 10.00 to 99.99 g/L 100.0 to 400.0 g/L (autoranging)

#### Salinity

% NaCl	0.0 to 400.0 % NaCl
SeaWater Scale	0.00 to 80.00 ppt
Practical Salinity	0.01 to 42.00 (PSU)
Temperature	-20.0 to 120.0 $^{\circ}\text{C}$ (-4.0 to 248.0 $^{\circ}\text{F}$ )

#### • ACCURACY

EC	$\pm 1\%$ of reading ( $\pm 0.01 \mu\text{S}/\text{cm}$ or 1 digit, whichever greater)
Resistivity	$\pm 1\%$ of reading (10 $\Omega\cdot\text{cm}$ or 1 digit, whichever greater)
TDS	$\pm 1\%$ of reading ( $\pm 0.05 \text{ ppm}$ or 1 digit, whichever greater)
Salinity	$\pm 1\%$ of reading
Temperature	$\pm 0.2 \text{ }^{\circ}\text{C}$ ( $\pm 0.4 \text{ }^{\circ}\text{F}$ , excluding probe error)

### OPERATIONAL GUIDE

- To switch ON and OFF: press **ON/OFF** (ⓘ).
- To take measurements: with meter off, connect the electrode's DIN connector to appropriate socket, remove the protective cap and immerse the electrode in the solution with the sleeves holes completely submerged. Switch ON the meter. Stir briefly and wait for a stable reading. For accurate readings tap the probe repeatedly to remove any air bubbles that may be trapped inside the sleeve.
- To select the range, conductivity, resistivity TDS or salinity: press **RANGE**.

\* The 0.001  $\mu\text{S}/\text{cm}$  EC range and 100  $\text{M}\Omega\cdot\text{cm}$  Resistivity range are not available with the 4 m cable probe.

- To enter USP or Salinity range while in EC range: press **MODE**.
- To enter Calibration mode: press **CAL** while in EC or Salinity range.
- To change calibration solution: press the **▲/▼** keys.

## EC (RESISTIVITY/TDS) CALIBRATION PROCEDURE

Up to five calibration points are available:

- Keep the probe in air for the first point.
- Wait for “CFM”. Press **CFM** to confirm offset calibration.
- Place the probe in the appropriate standard solution. The instrument will detect the standard.
- Wait for “CFM” blinking. Press **CFM** to accept the calibration. Repeat until all five calibration points are done.
- To perform a one, two, three or four point calibration press **ESC** after the appropriate point was confirmed.

*Note: Resistivity and TDS readings are automatically derived from the EC reading and no specific calibration for TDS is needed.*

## NaCl CALIBRATION PROCEDURE

- Place the probe in 100.0% NaCl standard solution.
- Wait for “CFM” blinking.
- Press **CFM** to accept the calibration. The meter returns to measurement mode.

## SETUP MODE

- To enter/exit SETUP mode: press **SETUP** while in measurement mode.
- To toggle between the displayed parameters: press the **▲/▼** keys.
- To enter/exit SETUP changing mode: press **Modify** or simply select option.

## GLP MODE

- To store the current reading into the memory: press **LOG** while in measurement mode.
- To view logged data: press **RCL** while in measurement mode.
- To view more details: press **More**.
- To delete records: press **Delete** key.
- To delete all records: press **Delete All**.

## AutoEnd MODE

- To freeze the first stable reading on the LCD: press **AutoEnd** while in measurement mode; the “WAIT” tag will blink until the reading will stabilize, then “Hold” will be displayed.
- To return to the measurement mode: press **Continue**.