

# Multiparameter Waterproof Meters

Multiparameter measurement in compact,  
IP67 rated waterproof enclosures

 **HANNA**<sup>®</sup>  
instruments

## HI98194 Features

HI98194

# Multiparameter Waterproof Meter

pH, ORP, EC, TDS, Resistivity, Salinity, Seawater  $\sigma$ , Dissolved Oxygen, Atmospheric Pressure and Temperature

- **Waterproof**
  - IP67 rated waterproof, rugged enclosure for meter, IP68 for probe
- **Digital probe**
  - Digital probe with integral temperature sensor and three ports for pH (ORP), EC and DO sensors
- **Color coded, field replaceable sensors**
- **Auto-sensor recognition**
- **Quick calibration feature**
- **Automatic barometric pressure compensation**
- **Automatic temperature compensation**
- **Automatic logging**
  - Store up to 45,000 samples
- **Log-on-demand**
  - Store measurement data at the press of a button
- **GLP**
  - GLP data provides data from previous five calibrations to ensure Good Laboratory Practices are met
- **Dedicated help key**
  - On-screen context specific help is readily available at the press of a button
- **Backlit LCD display with multifunction virtual keys**
- **Intuitive keypad**
  - Dedicated and virtual soft keys
- **Connectivity**
  - PC connectivity via opto-isolated micro-USB with Hanna software
- **Up to 360 hours of battery life**
  - Powered by (4) 1.5V AA batteries



- **Quick Connect Probe**
  - Fast, secure and waterproof connection

## For Universal Applications

HI98184 provides multiparameter measurement in a compact and rugged, IP67 waterproof enclosure. Ideal for demanding applications, this meter features our rugged, quick connect digital probe with field replaceable sensors.

A backlit, graphic LCD provides easy to read resolution even in low-lit areas. A combination of dedicated and soft keys allows easy, intuitive operation in a choice of languages.

## Data Logging

The HI98194 allows users to store up to 45,000 continuous or log-on-demand samples with logging intervals from one second to three hours. Logged data can be later transferred to a PC with the HI920015 micro USB cable and Hanna HI9298194 software.

## Dedicated HELP Button

The contextual HELP menu can be accessed to obtain on-screen information and assistance about each feature at the touch of a button.

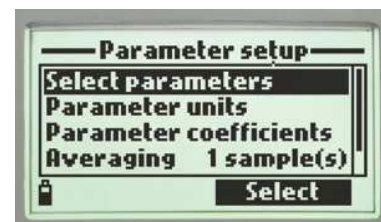
## Quick Connect Probe

The HI7698194 probe features a quick connect DIN connector to make attaching and removing the probe simple and easy.

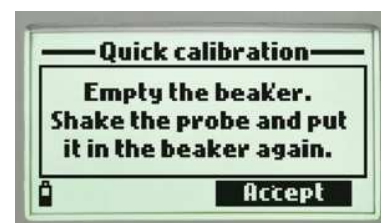


HI9828-25  
Quick Calibration  
solution

- **Field ready with Quick Calibration solution**
  - Standardize pH and conductivity with one calibration solution
  - Simply screw the calibration beaker filled with HI 9828-25 (500 mL) or HI9828-27 (1 gallon) solution onto the probe, select "Quick calibration" from the menu and press OK. Individual calibration may also be performed using multiple calibration points



- **Setup**
  - Extensive setup screen features



- **Guides**
  - On screen guides are displayed to help you while performing procedures such as calibration

## pH: Specific Features

- **Calibration**
  - Up to a three-point calibration with five standard buffers and one custom buffer available
- **pH in mV option**
  - Useful for diagnostics
- **GLP data**
  - Offset, slope, date, time and buffers used
- **Automatically temperature compensated readings**
- **pH or pH/ORP field replaceable sensors**
  - Gel-filled and maintenance free
  - Double junction for reduced contamination of reference cell

## EC/TDS/Resistivity: Specific Features

- **Calibration**
  - Single-point calibration from six standards (84  $\mu\text{S}/\text{cm}$ , 1.413  $\mu\text{S}/\text{cm}$ , 5.00  $\text{mS}/\text{cm}$ , 12.88  $\text{mS}/\text{cm}$ , 80  $\text{mS}/\text{cm}$ , 111.8  $\text{mS}/\text{cm}$  or custom point)
- **Temperature compensation**
  - Automatic Temperature Compensation
  - Configurable temperature coefficient range from 0.00 to 6.00%/°C
  - Choice of reference temperatures at 20 or 25°C
  - Absolute conductivity can be displayed along with the temperature compensated value
- **Auto-ranging**
- **Salinity readings**
  - Practical Salinity Scale (PSU) based on conductivity calibration

## Dissolved Oxygen: Specific Features

- **Choice of units**
  - Display units in % saturation or ppm (mg/L)
- **Salinity compensation for saline waters**
  - Manual entry of salinity values
  - Readings compensated for salinity effects
- **Built-in barometer**
  - Automatic compensation for changes in atmospheric pressure
  - User selectable units
- **Temperature compensation**
- **Polarization**
  - Automatic polarization of probe at startup
- **Membrane caps**
  - Ready-to-use HDPE pre-tensioned membrane caps are easy to replace



- **Rugged carrying case with custom insert included**

# HI98194 Probe and Sensor Features and Specifications



Probe Specifications	HI7698194	
Sensor Inputs	three (pH or pH/ORP, DO, EC)	
Sample Environment	fresh, brackish, seawater	
Waterproof Protection	IP68	
Operating Temperature	-5 to 55°C	
Storage Temperature	-20 to 70°C	
Maximum Depth	20 m (66')	
Dimensions (without cable)	342 mm (13.5"); 46 mm (1.8") dia	
Weight (without sensors)	570 g (20.1 oz.)	
Cable Specification	multistrand-multiconductor shielded cable with internal strength member rated for 68 kg (150 lb.) intermittent use	
Wetted Materials	Body	ABS
	Threads	Nylon
	Shield	ABS / 316 SS
	Temperature Probe	316 SS
	O-rings	EPDM

## Multi-function Sensor

- **Quick sensor replacement**
  - Sensor replacement is quick and easy with field replaceable, screw type connectors and are color coded for easy identification. These meters automatically recognize sensors.



Sensor Specifications	HI7698194-0	HI7698194-1	HI7698194-3	HI7698194-2	
Description	pH sensor	pH/ORP sensor	EC sensor	DO sensor	
Measurement Type	pH, mV (pH)	pH, mV (pH), ORP	EC	DO (% saturation and concentration)	
Measurement Range	0.00 to 13.00 pH; ±600.0 mV	0.00 to 13.00 pH; ±600.0 mV; ±2000.0 mV	0.0 to 200.0 mS/cm; 0.0 to 400 mS/cm (absolute)	0.0 to 500.0 %; 0.00 to 50.00 mg/L	
Temperature Range	-5 to 55°C	-5 to 55°C	-5 to 55°C	-5 to 55°C	
Color Code	red	red	blue	white	
Materials	Tip	glass (pH)	stainless steel electrodes AISI 316	cat/an: Ag/Zn	
	Junction	ceramic	ceramic	membrane: HDPE	
	Body	PEI	PEI	ABS/epoxy	white top ABS
	Electrolyte	gel	gel		
	Reference	double	double		
Maintenance Solution	HI70300 (storage solution)	HI70300 (storage solution)	none	HI7042S (DO electrolyte)	
Dimensions	118 x 15 mm	118 x 15 mm	111 x 17 mm	99 x 17 mm	
Depth	20 m (65')	20 m (65')	20 m (65')	20 m (65')	