

HI98196

## Multiparameter Waterproof Meter

pH, ORP, 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 two connections for pH (ORP) 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
- **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

HI98196 provides multiparameter measurement in a compact and rugged, IP67 waterproof enclosure. Ideal for demanding applications, this meter features our rugged, quick connect multi-function 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

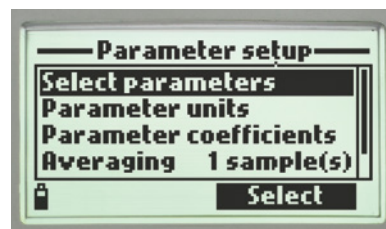
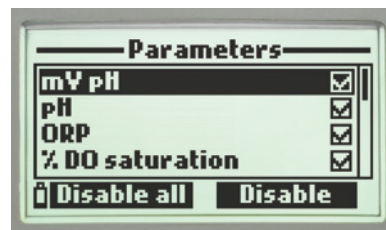
The HI98196 allows users to store up to 45,000 continuous or log-on-demand samples with logging intervals from one second to three hours. Logged data can be later transferred to a PC with the HI920015 micro USB cable and Hanna HI9298194 software.

## GLP and On-Screen Help

Comprehensive GLP data includes data from last five calibrations. 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 HI7698196 probe features a quick connect DIN connector to make attaching and removing the probe simple and easy.



## 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

## 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

- **Setup**
  - Extensive setup screen features



- rugged carrying case with custom insert included

# HI98196 Probe and Sensor Features and Specifications



Specifications	HI7698196	
Sensor Inputs	two (pH or pH/ORP, DO)	
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	HI7698194-2	
Description	pH sensor	pH/ORP sensor	DO sensor	
Measurement Type	pH, mV (pH)	pH, mV (pH), ORP	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 500.0 %; 0.00 to 50.00 mg/L	
Temperature Range	-5 to 55°C	-5 to 55°C	-5 to 55°C	
Color Code	red	red	white	
Materials	Tip	glass (pH)	glass (pH); Pt (ORP)	cat/an: Ag/Zn
	Junction	ceramic	ceramic	membrane: HDPE
	Body	PEI	PEI	white top ABS
	Electrolyte	gel	gel	
	Reference	double	double	
Maintenance Solution	HI70300 (storage solution)	HI70300 (storage solution)	HI7042S (DO electrolyte)	
Dimensions	118 x 15 mm	118 x 15 mm	99 x 17 mm	
Depth	20 m (65')	20 m (65')	20 m (65')	



**Specifications**

**HI98196**

pH / mV	Range	0.00 to 14.00 pH / ±600.0 mV
	Resolution	0.01 pH / 0.1 mV
	Accuracy	±0.02 pH / ±0.5 mV
	Calibration	automatic up to three points with automatic recognition of five standard buffers (pH 4.01, 6.86, 7.01, 9.18, 10.01) or one custom buffer
ORP	Range	±2000.0 mV
	Resolution	0.1 mV
	Accuracy	±1.0 mV
	Calibration	automatic at one custom point (relative mV)
Dissolved Oxygen	Range	0.0 to 500.0%; 0.00 to 50.00 ppm (mg/L)
	Resolution	0.1%; 0.01 ppm (mg/L)
	Accuracy	0.0 to 300.0%: ±1.5% of reading or ±1.0% whichever is greater; 300.0 to 500.0%: ±3% of reading; 0.00 to 30.00 ppm (mg/L): ±1.5% of reading or ±0.10 ppm (mg/L), whichever is greater; 30.00 ppm (mg/L) to 50.00 ppm (mg/L): ±3% of reading
Atmospheric Pressure	Calibration	automatic one or two points at 0, 100% or one custom point
	Range	450 to 850 mm Hg; 17.72 to 33.46 in Hg; 600.0 to 1133.2 mbar; 8.702 to 16.436 psi; 0.5921 to 1.1184 atm; 60.00 to 113.32 kPa
	Resolution	0.1 mm Hg; 0.01 in Hg; 0.1 mbar; 0.001 psi; 0.0001 atm; 0.01 kPa
	Accuracy	±3 mm Hg within ±15°C from the temperature during calibration
Temperature	Calibration	automatic at one custom point
	Range	-5.00 to 55.00°C; 23.00 to 131.00°F; 268.15 to 328.15K
	Resolution	0.01°C; 0.01°F; 0.01K
	Accuracy	±0.15°C; ±0.27°F; ±0.15K
Additional Specifications	Calibration	automatic at one custom point
	Temperature Compensation	automatic from -5 to 55°C (23 to 131°F)
	Logging Memory	45,000 records (continuous logging or log-on-demand of all parameters)
	Logging Interval	one second to three hours
	PC Connectivity	via USB (with Hanna PC software)
	Environment	0 to 50°C (32 to 122°F); RH 100% IP67
Battery Type / Life	1.5V AA batteries (4) / approximately 360 hours of continuous use without backlight (50 hours with backlight)	
Dimensions / Weight	185 x 93 x 35.2 mm (7.3 x 3.6 x 1.4") / 400 g (14.2 oz.)	



HI98194 includes:



HI7698194/4  
probe



HI7698194-0  
pH sensor



HI7698194-3  
EC sensor



HI7698194-2  
DO sensor



HI9828-25  
quick calibration  
solution



HI76981942  
probe maintenance  
kit

HI98195 includes:



HI7698195/4  
probe



HI7698194-0  
pH sensor



HI7698194-3  
EC sensor



HI9828-25  
quick calibration  
solution



HI76981952  
probe maintenance  
kit