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

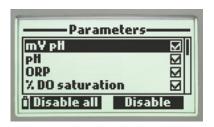
The HI7698196 probe features a quick connect DIN connector to make attaching and removing the probe simple and easy.

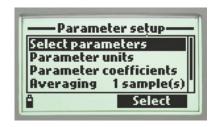
pH: Specific Features

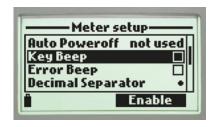
- Calibration
 - Up to a three-point calibration with five standard buffers and one custom buffer available
- pH in mV option
 - Useful for diagnostics
- GLP data
 - · Offset, slope, date, time and buffers used
- Automatically temperature compensated readings
- pH or pH/ORP field replaceable sensors
 - · 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



Multi-f	unction	Sensor
i luiti-i	unction	2611201

- 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

Specifications	HI7698196	HI7698196	
Sensor Inputs	two (pH or pH/ORP, D	two (pH or pH/ORP, DO)	
Sample Environment	fresh, brackish, seaw	fresh, brackish, seawater	
Waterproof Protection	IP68	IP68	
Operating Temperature	-5 to 55°C	-5 to 55°C	
Storage Temperature	-20 to 70°C	-20 to 70°C	
Maximum Depth	20 m (66')	20 m (66′)	
Dimensions (without cable)	342 mm (13.5"); 46 m	342 mm (13.5"); 46 mm (1.8") dia	
Weight (without sensors)	570 g (20.1 oz.)	570 g (20.1 oz.)	
Cable Specification		multistrand-multiconductor shielded cable with internal strength member rated for 68 kg (150 lb.) intermittent use	
	Body	ABS	
	Threads	Nylon	
Wetted Materials	Shield	ABS / 316 SS	
	Temperature Probe	316 SS	
	O-rings	EPDM	







Sensor Specifications	5	HI7698194-0	HI7698194-1	HI7698194-2
Description		pH sensor	pH/ORP sensor	D0 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 (D0 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	
	Range	$0.00\mathrm{to}14.00\mathrm{pH}/\pm600.0\mathrm{mV}$	
pH/mV	Resolution	$0.01\mathrm{pH}/0.1\mathrm{mV}$	
	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%: $\pm 1.5\%$ of reading or $\pm 1.0\%$ whichever is greater; 300.0 to 500.0%: $\pm 3\%$ of reading; 0.00 to 30.00 ppm (mg/L): $\pm 1.5\%$ of reading or ± 0.10 ppm (mg/L), whichever is greater; 30.00 ppm (mg/L) to 50.00 ppm (mg/L): $\pm 3\%$ of reading	
	Calibration	automatic one or two points at 0, 100% or one custom point	
Atmospheric Pressure	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	
	Calibration	automatic at one custom point	
Temperature	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	
	Calibration	automatic at one custom point	
Additional Specifications	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.)	

Ordering Information





HI98194 includes:





HI7698194-0 pH sensor



HI7698194-3 EC sensor



HI7698194-2 D0 sensor



HI7698195/4 probe

HI98195 includes:



HI7698194-0 pH sensor





HI9828-25 quick calibration solution



HI76981942 probe maintenance kit



HI9828-25 quick calibration solution



HI76981952 probe maintenance kit