HI98195

Multiparameter Waterproof Meter

pH, ORP, EC, TDS, Resistivity, Salinity, Seawater σ and Temperature

- Waterproof
 - IP67 rated waterproof, rugged enclosure for meter, IP68 for probe
- · Digital probe
 - Digital probe with integral temperature sensor and two ports for pH (ORP) and EC sensors
- · Color coded, field replaceable sensors
- · Auto-sensor recognition
- · Quick calibration feature
- 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

HI98195 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 HI98195 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 HI7698195 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

EC/TDS/Resistivity: Specific Features

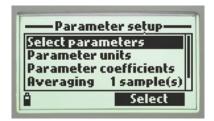
- Calibration
 - Single-point calibration from six standards (84 μS/cm, 1.413 μS/cm, 5.00 mS/cm, 12.88 mS/cm, 80 mS/cm, 111.8 mS/cm or custom point)
- Temperature compensation
 - · Automatic Temperature Compensation
 - Configurable temperature coefficient range from 0.00 to 6.00%/°C
 - Choice of reference 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



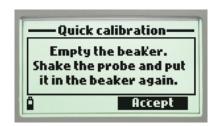
HI9828-25 Quick Calibration

• 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



 Rugged carrying case with custom insert included

HI98195 Probe and Sensor Features and Specifications



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

Specifications	HI7698195			
Sensor Inputs	two (pH or pH/ORP, E	two (pH or pH/ORP, EC)		
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		HI7698194-0	HI7698194-1	HI7698194-3
Description		pH sensor	pH/ORP sensor	EC sensor
Measurement Type		pH, mV (pH)	pH, mV (pH), ORP	EC
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)
Temperature Range		-5 to 55°C	-5 to 55°C	-5 to 55°C
Color Code		red	red	blue
	Tip	glass (pH)	glass (pH); Pt (ORP)	stainless steel electrodes AISI 316
	Junction	ceramic	ceramic	
Materials	Body	PEI	PEI	ABS/epoxy
	Electrolyte	gel	gel	
	Reference	double	double	
Maintenance Solution		HI70300 (storage solution)	HI70300 (storage solution)	none
Dimensions		118 x 15 mm	118 x 15 mm	111 x 17 mm
Depth		20 m (65')	20 m (65')	20 m (65')
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Specifications		HI98195		
	Range	0.00 to 14.00 pH / ±600.0 mV		
pH/mV	Resolution	0.01 pH/0.1 mV		
	Accuracy	±0.02 pH / ±0.5 mV		
	Calibration	automatic one, two, or 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)		
	Range	0 to 200 mS/cm (absolute EC up to 400 mS/cm)		
EC	Resolution	$ \begin{array}{l} \textbf{manual:} \ 1 \ \mu \text{S/cm;} \ 0.001 \ \text{mS/cm;} \ 0.01 \ \text{mS/cm;} \ 1 \ \text{mS/cm;} \\ \textbf{automatic:} \ 1 \ \mu \text{S/cm} \ from \ 0 \ to \ 9999 \ \mu \text{S/cm;} \ 0.01 \ \text{mS/cm} \ from \ 10.00 \ to \ 99.99 \ \text{mS/cm;} \ 0.1 \ \text{mS/cm} \ from \ 100.0 \ to \ 400.0 \ \text{mS/cm;} \\ \textbf{automatic mS/cm:} \ 0.001 \ \text{mS/cm} \ from \ 0.000 \ to \ 9.999 \ \text{mS/cm;} \ 0.01 \ \text{mS/cm} \ from \ 10.00 \ to \ 99.99 \ \text{mS/cm;} \ 0.1 \ \text{mS/cm} \ from \ 100.0 \ to \ 400.0 \ \text{mS/cm;} \\ \end{array}$		
	Accuracy	±1% of reading or ±1 µS/cm whichever is greater		
	Calibration	automatic single point, with six standard solutions (84 µS/cm, 1413 µS/cm, 5.00 mS/cm, 12.88 mS/cm, 80.0 mS/cm, 111.8 mS/cm) or custom point		
TDS	Range	0.0 to 400.0 ppt (g/L) (the maximum value depends on the TDS factor)		
	Resolution	$\label{eq:manual:1ppm(mg/L);0.001ppt(g/L);0.01ppt(g/L);0.1ppt(g/L);1ppt(g/L);} automatic:1ppm(mg/L);0.01ppt(g/L);0.01ppt(g/L);0.01ppt(g/L);from 10.00 to 99.99ppt(g/L);0.1ppt(g/L) from 100.0 to 400.0ppt(g/L); automatic ppt(g/L);0.01ppt(g/L);from 0.000 to 9.999ppt(g/L);0.01ppt(g/L) from 10.00 to 99.99ppt(g/L); 0.1ppt(g/L) from 10.00 to 400.0ppt(g/L); 0.1ppt(g/L) from 10.00 to 99.99ppt(g/L); 0.1ppt(g/L) from 10.00 to 99.99ppt(g/L) from 10.00 to 99.99ppt(g/L) from 10.00 to 99.90ppt(g/L) from 10.00 to 99.90ppt(g/L) from 10.00 $		
	Accuracy	±1% of reading or ±1 ppm (mg/L) whichever is greater		
	Calibration	based on conductivity or salinity calibration		
	Range	0 to 999999 Ω•cm; 0 to 1000.0 kΩ•cm; 0 to 1.0000 MΩ•cm		
Resistivity	Resolution	dependent on resistivity reading		
	Calibration	based on conductivity or salinity calibration		
	Range	0.00 to 70.00 PSU		
Salinity	Resolution	0.01 PSU		
Salliffy	Accuracy	±2% of reading or ±0.01 PSU whichever is greater		
	Calibration	based on conductivity calibration		
	Range	0.0 to 50.0 σ_{v} , σ_{0} , σ_{15}		
Sogwator	Resolution	$0.1\sigma_{\scriptscriptstyle U}\sigma_{\scriptscriptstyle 0},\sigma_{\scriptscriptstyle 15}$		
Seawater σ	Accuracy	$\pm 1\sigma_{\scriptscriptstyle 1},\sigma_{\scriptstyle 0},\sigma_{\scriptstyle 15}$		
	Calibration	based on conductivity or salinity calibration		
	Range	-5.00 to 55.00°C; 23.00 to 131.00°F; 268.15 to 328.15K		
Temperature	Resolution	0.01°C; 0.01°F; 0.01K		
remperature	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.)		