



water  
resistant



battery  
powered



interchangeable  
electrode



DIN  
connection



replaceable  
electrode

## portable waterproof multiparameter meter

**Professional testing and analysis out in the field is supported by the Hanna HI-98196 portable multiparameter meter.**

Waterproofed to IP67 this compact, robust instrument comes complete with a multi-function probe and quick connect field replaceable sensors. Optimum practice is further supported with a great pack of GLP features and optional screw-on calibration beaker plus quick calibration solution.

Designed to deliver high levels of accuracy even under difficult conditions, the HI-98196 also comes with a comprehensive pack of benefits for a wide range of applications:

### Supporting professional working practice

- Press Auto-Hold while measuring and the current reading will remain displayed to give you time to take detailed records.
- An Out of Calibration Range warning can be engaged to keep you informed about the current calibration and help avoid performing measurements that are out of range.

### Extensive data logging

- Continuous logging and log-on demand allows you to record and save up to 44,000 samples.
- Data can be transferred to PC via microUSB and dedicated software.

### GLP and on-screen assistance

- Press the GLP key and last calibration data will be displayed directly on-screen to support good laboratory practice.
- The contextual Help menu can be accessed at the touch of a button and will deliver immediate on-screen information and assistance on the feature currently displayed.

### Simple to operate

- A backlit, graphic LCD provides easy to read resolution even in bright sunlight or low-lit areas.
- Dedicated and soft keys combine to allow easy, intuitive operation in a choice of languages.



# Multiparameter Waterproof Weter | HI-98196



## A great range of features

Accurate and easy to use even in demanding applications

- **Waterproof:**  
IP67 rated housing for meter: IP68 for probe
- **Colour-coded sensors** - easy to replace in the field
- **Auto-sensor recognition**
- **Quick calibration feature**
- **pH CAL CHECK™:** alerts you to problems during calibration including dirty or broken electrode, contaminated buffer and overall probe condition
- **Automatic or manual temperature compensation:** pH sensors incorporate a built-in temperature sensor



## Promotes good laboratory practice

- **Automatic logging:** stores up to 45,000 samples
- **Log-on demand:** stores measurement data at the press of a button
- **GLP:** provides data from previous calibration to support best working practice
- **Auto-hold:** automatically holds the first stable reading on display
- **Calibration timeout:** alerts you when calibration is due at specified intervals
- **Help menu:** on-screen context specific help is readily available at the press of a button



## User-friendly

- **Clear display:** dot matrix display with multifunction virtual keys
- **Backlit LCD**
- **Intuitive keypad:** hard and virtual soft keys
- **Connectivity:** PC connectivity via microUSB and HI-92000 software
- **200-hour battery life:** 4 x 1.5AA batteries



## pH specific features

- **CAL CHECK™ electrode diagnostics:** alerts users to calibration status
- **Manual or automatic temperature compensation**
- **Calibration:** up to 5-point calibration with 7 standard buffers and 5 custom buffers

## Dissolved Oxygen specific features

- **Choice of units:**  
display units in % saturation or mg/L (ppm)
- **Salinity compensation:** users are able to set the salinity value
- **Pressure compensation:** built-in barometer with user-selectable units (mmHg; inHg; atm; psi; kPa; mbar)
- **Temperature compensation:** built-in sensor with one or two point temperature calibration (°C or °F)
- **Built-in calculations:** BOD; OUR; SOUR
- **Polarisation:** automatic polarisation of probe at start-up
- **Membrane caps:** ready to use PTFE membrane caps are easy to replace



## multi-function sensor

Sensor replacement is quick and easy with field replaceable, screw-type connectors. The sensors are colour-coded for easy identification and are automatically recognised by the meter.

### Probe Specifications

Product Code	HI-7698196	
Sensor inputs	two (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; 46 mm dia	
Weight (without batteries and sensors)	570 g	
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



### Sensor Specifications

Product Code		HI-7698194-0	HI-7698194-1	HI-7698194-2
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 ; $\pm 600.0$ mV	0.00 to 13.00 pH; $\pm 600.0$ mV; $\pm 2000.0$ 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		HI-70300 (storage solution)	HI-70300 (storage solution)	HI-7042S (DO electrolyte)
Dimensions		118 x 15 mm	118 x 15 mm	99 x 17 mm
Depth		20 m	20 m	20 m





# Multiparameter Waterproof Weter | HI-98196

manufactured by



## Ordering Information

### Multiparameter Waterproof Weter | HI-98196

supplied with

- HI-7698196 probe
- HI-7698194-0 pH sensor
- HI-7698194-2 DO sensor
- HI-92000 PC software
- HI-920015 micro USB cable
- 1.5V AA batteries (4)
- instruction manual
- quick start guide
- quality certificate
- rugged carrying case with custom thermoformed insert



**HI-98196 can transfer data to a computer via a USB connection and Windows® compatible software (not included)**

**Code: HI-92000 (Software)    Code: HI-920013 (USB cable)**

## Specifications

Product Code	HI-98196	
pH / mV	Range	0.00 to 14.00 pH / $\pm 600.0$ mV
	Resolution	0.01 pH / 0.1 mV
	Accuracy	$\pm 0.02$ pH / $\pm 0.5$ 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	$\pm 2000.0$ mV
	Resolution	0.1 mV
	Accuracy	$\pm 1.0$ 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 $\pm 0.10$ 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	$\pm 3$ mm Hg within $\pm 15^\circ\text{C}$ from the temperature during calibration
	Calibration	automatic at one custom point
Temperature	Range	$-5.00$ to $55.00^\circ\text{C}$ ; $23.00$ to $131.00^\circ\text{F}$ ; 268.15 to 328.15K
	Resolution	$0.01^\circ\text{C}$ ; $0.01^\circ\text{F}$ ; 0.01K
	Accuracy	$\pm 0.15^\circ\text{C}$ ; $\pm 0.27^\circ\text{F}$ ; $\pm 0.15\text{K}$
	Calibration	Automatic at one custom point
Temperature Compensation	automatic from $-5$ to $55^\circ\text{C}$ ( $23$ to $131^\circ\text{F}$ )	
Logging Memory	45,000 records (continuous logging or log-on-demand of all parameters)	
Logging Interval	one second to three hours	
PC Connectivity	USB (with HI929829 software)	
Environment	$0$ to $50^\circ\text{C}$ ( $32$ to $122^\circ\text{F}$ ); 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 / 400 g	





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