



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 ; ±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)
	Junction	ceramic	ceramic
	Body	PEI	PEI
	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



## 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°C; 0.01°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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**Pricing on any accessories shown can be found by keying the part number into the search box on our website.**

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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