



**PERFECT
SOLUTION**
for your
**INSTRUMENTATION
NEEDS**



TDS • Conductivity • pH • ORP • Temp • BRIX • Salt • Coffee • Flow

About Us



Since 1989, HM Digital has been your premier source for the finest quality water testing Instrumentation supplier.

From our facilities in Los Angeles, Seoul, China and India, we have the capability to Ship to anywhere in the world and Service the entire globe. Our handheld meters, in-line monitors, controllers, sensors and calibrations solutions are used in a myriad of applications. They are superior in quality, features and performance, yet made available at a very economical cost.

HM Digital takes pride not only in quality of our products, but also in our commitment to customer service and the shortest lead times in the industry.

With HM Digital Instruments, you can find the right solution for your application.

LeakBlock Sensor

LBS-10 LeakBlock Sensor

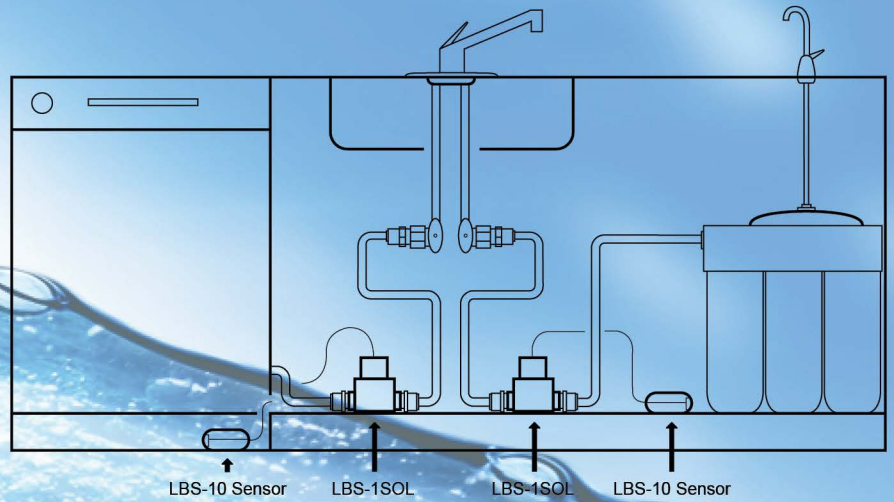
3/8" NPT female thread ID

1/2" BSP male thread OD

Max. Oper. Pressure: 115 psi / 7.9 Bar

Maximum Flow Rate: 5 GPM / 19 LPM

Temp Range: 34°F / 1°C - 145°F / 63°C








APPLICATIONS:

- Filtration
- Reverse Osmosis
- Dishwasher
- Coffee Maker
- Refrigerator
- Water Cooler
- Icemaker
- Toilet
- Beverage Stations
- Under Sink
- Clothes Washer
- Water Heater
- Ideal for Hotels/Multi-Story Dwellings



Handhelds: TDS/EC






	ZT-2	TDS-EV	TDS-3 / EC-3	TDS-4
			 	
	<ul style="list-style-type: none"> • Retail economy model • Reliable meter at an unbeatable price • Auto Shut-Off • “HMD” line • Ideal for private labeling 	<ul style="list-style-type: none"> • Economy model ideal for end-users • Translucent smoke housing • Excellent as a promotional item • Includes a TDS chart on the back of the meter • Auto Shut-Off 	<ul style="list-style-type: none"> • Ideal for commercial use, with vinyl carrying case and belt clip • Includes digital thermometer • Hold function stores readings outside of the water; Auto-off function conserves battery power • Large, easy-to-read display • Strong, durable plastic 	<ul style="list-style-type: none"> • The smallest and lightest TDS meter on the market • Sleek pocket design is perfect for personal or consumer use • Includes hold function, auto-off function, ATC, large display, and factory calibration • Advanced microprocessor technology
RANGE	0-999 ppm(mg/L)	0-9990 ppm(mg/L)	0-9990 ppm(mg/L) 0-9990 μ S(μ S/cm)	0-9990 ppm(mg/L)
TEMP. RANGE	n/a	n/a	1-80°C / 33-176°F	1-80°C / 33-176°F
ATC	Yes	Yes	Yes	Yes
ACCURACY	\pm 3%	\pm 3%	\pm 2%	\pm 2%
RESOLUTION	1 ppm	1 ppm	1 ppm; 1 μ S	1 ppm
CALIBRATION	Analog to any point	Analog to any point	Analog to any point	Analog to any point
POWER SOURCE	2 x 1.5V button cell	2 x 1.5V button cell	2 x 1.5V button cell	2 x 1.5V button cell
DIMENSIONS	14 x 2.3 x 1.5cm (5.5 x .9 x .75 in)	15.5 x 3.1 x 2.3 cm (6.1 x 1.25 x 1 in)	15.5 x 3.1 x 2.3 cm (6.1 x 1.25 x 1 in)	14 x 2.3 x 1.5 cm (5.5 x .9 x .55 in)
WEIGHT	31.2 g (1.1 oz)	56.7 g (2 oz)	76.5 g (2.7 oz) (with case)	34 g (1.2 oz)

***The most popular
handheld TDS testers
in the world***



Handhelds: TDS/EC/PH



TDS-4TMA	AP-1: AquaPro	AP-2: AquaPro	COM-80	PH-80
				
<ul style="list-style-type: none"> • The smallest and lightest TDS meter on the market • Sleek pocket design is perfect for personal or consumer use • Includes hold function, auto-off function, ATC, large display, and factory calibration • Advanced microprocessor technology • Aquarium retail package 	<ul style="list-style-type: none"> • Upscale retail TDS meter • Water resistant body • Large LCD and digital calibration • Includes a TDS chart on the back of the meter and a magnetic housing • Four-digit display 	<ul style="list-style-type: none"> • Upscale retail EC meter • Water resistant body • Large LCD and digital calibration • Includes an EC chart on the back of the meter and a magnetic housing • Four-digit display 	<ul style="list-style-type: none"> • EC/TDS Hydro Tester • Water resistant body • Large LCD and digital calibration • Ideal for hydroponics and indoor gardening • Four scales, easily selected by user 	<ul style="list-style-type: none"> • Low-cost pH tester • Auto calibration • Modem design • Large LCD display • Water resistant body • Automatic Temperature Compensation (ATC) • Auto-off, data hold & low battery indicator functions • On-screen temperature reading • Factory calibrated to pH 7.0 • Includes batteries, pH 7.0 buffer, and electrode storage solution
0-9990 ppm(mg/L)	0-5000 ppm (mg/L)	0-9999 μS ($\mu\text{S}/\text{cm}$)	0-9999/99 $\mu\text{S}/\text{mS}$; 0-5000/5.0 ppm/ppt	0.0-14.0 pH
1-80°C / 33-176°F	1-80°C / 33-176°F	1-80°C / 33-176°F	1-80°C / 33-176°F	1-80°C / 33-176°F
Yes	Yes	Yes	Yes	Yes
± 2%	± 2%	± 2%	± 2%	± 2%
1 ppm	1 ppm	1 μS	1 μS ; 0.1 mS; 1 ppm; 0.1 ppt	0.1 pH; 0.1°C/F
Analog to any point	Digital to any point	Digital to any point	Digital to any point	Auto-ranging to 4, 7 or 10 pH
2 x 1.5V button cell	1 x 3V button cell	1 x 3V button cell	3 x 1.5V button cell	3 x 1.5V button cell
14 x 2.3 x 1.5 cm (5.5 x .9 x .55 in)	15 x 2.8 x 1.3 cm (5.9 x 1.1 x .5 in)	15 x 2.8 x 1.3 cm (5.9 x 1.1 x .5 in)	15.3 x 3.2 x 1.8 cm (6 x 1.3 x .7 in)	15.3 x 3.2 x 1.8cm (6.0x 1.3 x0.7 in)
34 g (1.2 oz)	42.5 g (1.5 oz)	42.5 g (1.5 oz)	53.9 g (1.9 oz)	53.9 g (1.9 oz)





What is TDS?

Total Dissolved Solids (TDS) are the total amount of mobile charged ions, including minerals, salts or metals dissolved in a given volume of water. TDS is expressed in parts per million (ppm) or milligrams per liter (mg/L). TDS includes any inorganic element present other than the pure water molecule (H₂O) and suspended solids. TDS meters are based on Electrical Conductivity (EC).

TDS affects everything that consumes, lives in, or uses water, whether organic or inorganic. While humans prefer low TDS in their drinking water, many species, such as plants and fish, need significantly higher levels. From drinking water to aquarium water or pipes, to glass cleaners, it is always crucial to test for TDS or EC to ensure that the water is right for the application.

The U.S. EPA's Maximum Contaminant Level of TDS for human consumption is 500 ppm (mg/L).










Handhelds: Pro Series

	COM-100	PH-200	COM-300	ORP-200
				
	<ul style="list-style-type: none"> Professional waterproof EC/TDS meter Three EC-to-TDS conversion factors Four scales: μS, mS, ppm, ppt Pinpoint accuracy, resolution of 0.1 Digital calibration Waterproof housing (IP67) Replaceable sensor probe 	<ul style="list-style-type: none"> Measures pH and Temperature Auto-ranging single point calibration with digital fine tuning to any point Includes electrode storage solution in cap Waterproof housing (IP67) Automatic Temperature Compensation Auto-off, data hold, low battery indicator and on-screen diagnostic functions Replaceable sensor probe Includes lanyard, batteries, pH 7.0 buffer powder packet and storage solution 	<ul style="list-style-type: none"> Measures EC, TDS, pH and Temp Five modes: mS, μS, PPM, 0.7 and 0.5 Digital calibration to any point within range On-screen temperature in $^{\circ}\text{C}$ and $^{\circ}\text{F}$ Waterproof housing (IP67) Replaceable platinum plated electrodes/pH probes 2 AAA batteries Factory calibrated to pH 7.0 Includes lanyard, batteries, pH 7.0 buffer powder packet and storage solution 	<ul style="list-style-type: none"> Measures ORP and Temperature Digital calibration by push button Platinum sensor and glass reference cell Waterproof housing (IP67) Automatic Temperature Compensation Auto-off, data hold & low battery indicator functions Replaceable sensor probe Factory calibrated to +200mV Includes lanyard, batteries and extra storage solution
RANGE	EC: 0 - 9999 μS ; 0 - 9.99 mS TDS: 0 - 8560 ppm (0.7 scale); 0 - 5000 ppm (0.5 scale); 0 - 8.56 ppt (0.7 scale); 0 - 5.00 ppt (0.5 scale)	0.0 - 14.0 pH	pH: 0-14pH / EC: 0-9990 μS 0-9.99 mS TDS: 0-5000ppm (0.5) 0-8560 ppm (0.7)	-999 to + 1000 mV
TEMP. RANGE	1-80 $^{\circ}\text{C}$ (33-176 $^{\circ}\text{F}$)	0-80 $^{\circ}\text{C}$ (32-176 $^{\circ}\text{F}$)	0-55 $^{\circ}\text{C}$ (32-130 $^{\circ}\text{F}$)	1-80 $^{\circ}\text{C}$ (33-176 $^{\circ}\text{F}$)
RESOLUTION	EC: 0.1 μS (0-99); 1 μS (100-999); 10 μS (1000-9990); 0.01 mS (0-9.99) TDS: 0.1 ppm (0-99); 1 ppm (100-999); 10 ppm (1000-9990); 0.01 ppt (0-8.56) Temp: 0.1 $^{\circ}\text{C}/^{\circ}\text{F}$	0.01 pH; 0.1 $^{\circ}\text{C}/^{\circ}\text{F}$	0.01 pH; 1 μS (0-999 μS); 10 μS (1000-9990 μS); 0.01 mS (0-9.99mS); 1 ppm (0-999ppm); 10 ppm (1000-9990 ppm)	1 mV; 0.1 $^{\circ}\text{C}/^{\circ}\text{F}$
ACCURACY	$\pm 2\%$	± 0.02	pH: ± 0.1 ; EC: $\pm 2\%$ TDS: $\pm 2\%$ Temp: $\pm 1^{\circ}\text{C} / 33^{\circ}\text{F}$	0.5% (± 2 mV)
CALIBRATION	Digital calibration by push button	Digital calibration by push button	Digital calibration by push button	Digital calibration by push button
ELECTRODE	Replaceable platinum sensor	Replaceable glass sensor & reference tube	Replaceable glass sensor & reference tube	Replaceable glass sensor & reference tube
HOUSING	Waterproof (IP67); floats	Waterproof (IP67); floats	Waterproof (IP67); floats	Waterproof (IP67); floats
ATC	Yes	Yes	Yes	n/a
POWER SOURCE	2 x AAA batteries (included)	2 x AAA batteries (included)	2 x AAA batteries (included)	2 x AAA batteries (included)
DIMENSIONS	18.5 x 3.4 x 3.4 cm (7.3 x 1.3 x 1.3 in)	18.5 x 3.4 x 3.4 cm (7.3 x 1.3 x 1.3 in)	18.5 x 3.4 x 3.4 cm (7.3 x 1.3 x 1.3 in)	18.5 x 3.4 x 3.4 cm (7.3 x 1.3 x 1.3 in)
WEIGHT	90.7g (3.2)	90.7g (3.2 oz)	96.4g (3.4 oz)	113 g (4.0 oz)



Buffers and Solutions



C-342 / C-1000	PH-BUF	ORP-BUF
 <ul style="list-style-type: none"> • NaCl calibration solution • Available in 342 ppm or 1000 ppm • Comes in lightweight HDPE plastic bottles 3oz (88.7 ml) • Sealed with a coated foam liner <p>Solution Equivalents</p> <p>342 NaCl = 362 as KCl; 478 as "442"; 700 μS</p> <p>1000 NaCl = 1060 as KCl; 1450 as "442"; 2000 μS liner</p>	 <ul style="list-style-type: none"> • Variety pack of pH buffer solution. • Powder has an indefinite shelf life. • Make only what you need, when you need it. <p>SPECIFICATIONS</p> <ul style="list-style-type: none"> • Total volume: 1.2 liters (100 ml per packet) • Contents: 3 packets of 4.0 pH, 6 packets of 7.0 pH, 3 packets of 10.01 pH • Includes 1 empty 100 ml bottle • Accuracy: ± 0.02 pH at 25$^{\circ}$ C 	 <ul style="list-style-type: none"> • Variety pack of ORP buffer solution. • Includes test kit to check the quality of your ORP electrode • Simple to use. <p>SPECIFICATIONS</p> <ul style="list-style-type: none"> • Total volume: 1.0 liters. (100 ml per packet) • Contents: 5 packets of +92mV, 5 packets of +265 mV • Includes 3 x 100 ml bottles • Accuracy: ± 0.2 ORP at 25$^{\circ}$ C
PH-STOR	ORP-STOR	PH-P7 /PH-P4
 <ul style="list-style-type: none"> • Contains fungicide • Keeps probe healthy and moist <p>3.3mol/L Potassium chloride (KCl) solution (7447-40-7) and deionized water = 99.99998%; Hyamine 3500 = 0.00002% (bactericide)</p>	 <ul style="list-style-type: none"> • Contains fungicide • Keeps probe healthy and moist <p>1.1mol/L Potassium chloride (KCl) solution (7447-40-7) and deionized water = 99.99998%; Hyamine 3500 = 0.00002% (bactericide)</p>	 <ul style="list-style-type: none"> • 20 pack of PH-7 or PH-4 • 20 ml packets <p>PH-P7 Water (CAS 7732-18-5) Potassium dihydrogen phosphate (CAS 7778-77-0) Disodium hydrogen phosphate (CAS 7558-79-4)</p> <p>PH-P4 Water (CAS 7732-18-5) Potassium hydrogen phthalate (CAS 877-24-7)</p>
PH-PSTOR	ASP-20	CP-1000
 <ul style="list-style-type: none"> • 20 pack of PH-STOR • 20 ml packets <p>3.3mol/L Potassium chloride (KCl) solution (7447-40-7) and deionized water = 99.99998%; Hyamine 3500 = 0.00002% (bactericide)</p>	 <ul style="list-style-type: none"> • 20 pack of Assorted solutions • 20 ml packets • 5 PH-STOR • 5 PH-P4 • 5 PH-P7 • 5 C-1000 	 <ul style="list-style-type: none"> • 20 pack of C-1000 • 20 ml packets <p>NaCl @ 25$^{\circ}$ C / 77$^{\circ}$ F</p> <p>1000 as 0.5 scale (NaCl) 1450 as 0.7 scale (442) 2000 as μS</p> <p>0.5 scale Conversion = NaCl 0.7 scale Conversion = 442</p>

About Calibration

A scientific instrument must be calibrated to achieve accurate testing results.


All HM Digital instruments come *factory calibrated* and are ready to use out of the box for most applications. They are designed to maintain consistency and retain calibration. However, factory calibration is done as a convenience for the user and there will be times when it is necessary to recalibrate an instrument. A pH or ORP instrument should be calibrated regularly, while a TDS or EC instrument will retain calibration for a considerably longer time. Calibration changes may occur during shipping or as a result of improper care. Always consult the instructions for a specific instrument regarding calibration. The only way to determine if a instrument has been calibrated properly is to check it against a laboratory-certified calibration solution or buffer.

HM Digital instruments are calibrated to specific points for the most common usages, depending upon the instrument. While factory calibration is suitable for most applications, there are many applications for which recalibration is necessary to achieve improved accuracy. An instrument should always be calibrated as close as possible to the level that will be **tested**. **If testing a range with a single instrument (such as RO water or tap water), the instrument should be calibrated in the upper third of the range.**

If calibrating a TDS instrument, always ensure the EC-to-TDS conversion factor of the instrument matches the calibration solution.



Controllers

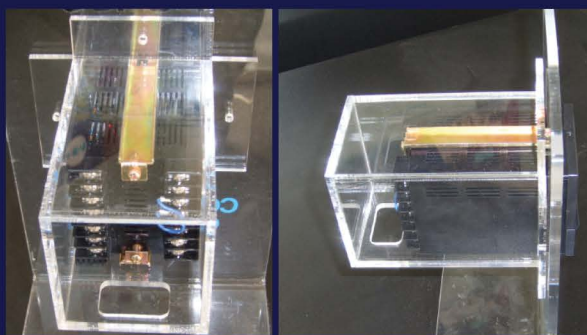
	PSC-50/PSC-54	PSC-60D/PSC-64D	PSC-150	PSC-154
				
	<p>ONE TDS/EC LINE, MINI CONTROLLER, SINGLE SCREEN</p> <ul style="list-style-type: none"> Extended range for TDS and EC 4-20mA output signal (PSC-54 only) Temperature display mode Digital calibration Fully adjustable relay control is set by the user to automatically stop a pump or valve if the level rises above the setting Stainless steel electrode Includes all parts at no extra cost 	<p>TWO TDS/EC LINES, DUAL DISPLAY</p> <ul style="list-style-type: none"> Continuously monitors two lines simultaneously Dual line TDS/EC displays feed and product water Extended range for TDS and EC 4-20 mA output signal (PSC-64D Only) Digital calibration Stainless steel electrodes (2 sensors) Includes all parts at no extra cost 	<p>ONE TDS/EC LINE, SINGLE SCREEN</p> <ul style="list-style-type: none"> Extended range for TDS and EC On-screen temperature display Digital calibration The fully adjustable relay control is set by the user to automatically stop a pump or valve if the TDS level rises above the setting Stainless steel electrode Includes all parts at no extra cost 	<p>ONE TDS/EC LINES, SINGLE SCREEN</p> <ul style="list-style-type: none"> Extended range for TDS and EC 4-20mA output signal On-screen temperature display Digital calibration The fully adjustable relay control is set by the user to automatically stop a pump or valve if the TDS level rises above the setting Stainless steel electrode Includes all parts at no extra cost
RANGE	0-9999 ppm (mg/L); 0-10.0 ppt (g/L) 0-9999 μ S; 0-20.00 mS	0-9999 ppm (mg/L); 0-10.0 ppt (g/L) 0-9999 μ S; 0-20.00 mS	0-5000 ppm (mg/L); 0-9999 μ S	0-5000 ppm (mg/L); 0-9999 μ S
ACCURACY	\pm 2%	\pm 2%	\pm 2%	\pm 2%
RESOLUTION	0-99.9: 0.1 ppm/ μ S; 100-9999: 1 ppm/ μ S 0.1 ppt/mS	0-99.9: 0.1 ppm/ μ S; 100-9999: 1 ppm/ μ S 0.1 ppt/mS	0-999: 0.1 ppm/ μ S; 1000-9999: 1 ppm/ μ S	0-999: 0.1 ppm/ μ S; 1000-9999: 1 ppm/ μ S
ATC	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)
CALIBRATION	Digital to any point	Digital to any point	Digital to any point	Digital to any point
SET POINT	On-screen buttons	On-screen buttons	On-screen buttons	On-screen buttons
RELAY CONTROLS	Simple switch, user-defined set point	n/a	Simple switch, user-defined set point	Simple switch, user-dened set point
ALARM	Optional setting	Optional setting	Optional setting	Optional setting
DISPLAY	2.3" LCD display w/ backlight	2.3" LCD display w/ backlight	Bright, tri-color 5/8" L.E.D. display	Bright, tri-color 5/8" L.E.D. display
PROBES	1/2" NPTF, 3 m (9.8 ft) cable	1/2" NPTF, 3 m (9.8 ft) cable	1/2" NPTF, 3 m (9.8 ft) cable	1/2" NPTF, 3 m (9.8 ft) cable
POWER SOURCE	AC 110V / 220V	AC 110V / 220V	AC 110V / 220V	AC 110V / 220V
DIMENSIONS	9.6 x 4.8 x 10 cm (3.8 x 1.9 x 3.9 in)	9.6 x 4.8 x 10 cm (3.8 x 1.9 x 3.9 in)	7.2 x 7.2 x 11.1 cm (2.8 x 2.8 x 4.4 in)	7.2 x 7.2 x 11.1 cm (2.8 x 2.8 x 4.4 in)
WEIGHT	261 g (9.2 oz)	261 g (9.2 oz)	230 g (8.1 oz)	241 g (8.5 oz)



Dosing Control / Dual Display

	CIC-150-N/CIC-150-4	CIC-152-N/CIC-152-4	PS-202	PPH-1000
				
	<p>ONE TDS/EC LINE, SINGLE SCREEN SINGLE DOSING CONTROL</p> <ul style="list-style-type: none"> • Extended range for TDS and EC • Two alarms (upper and lower) • On-screen temperature display • NaCl or 442 conversion factor • Upper limit and lower limit set points to control a pump or solenoid valve • Stainless steel electrode • Includes all parts at no extra cost 	<p>ONE TDS/EC LINE, SINGLE SCREEN DUAL DOSING CONTROL</p> <ul style="list-style-type: none"> • Extended range for TDS and EC • Two set points to control a range • Two alarms (max. and min) • On-screen temperature display • NaCl or 442 conversion factor • Upper and lower limit set points to control two devices, such as a pump and solenoid valve • Stainless steel electrode • Includes all parts at no extra cost 	<p>TWO TDS LINES, DUALSCREEN</p> <ul style="list-style-type: none"> • Ideal for commercial RO systems • Monitors and controls two lines simultaneously • The fully adjustable relay control is set by the user to automatically stop a pump or valve if the TDS level rises above the setting • Stainless steel electrode (2 sensors) • Includes all parts at no extra cost 	<p>ONE pH LINE, SINGLE SCREEN</p> <ul style="list-style-type: none"> • Ideal for controlling pH in commercial applications • 4-20mA output signal • Digital calibration • On-screen temperature display • Fully adjustable relay control with • 2 set points (High and Low) maintain desired range • Includes 3/4" sensor probe
RANGE	TDS: 0-5000 ppm (mg/L) NaCl; 0-8500 ppm (mg/L) 442; 0-9999 μ S	0-5000 ppm (mg/L) NaCl; 0-8500 ppm (mg/L) 442; 0-9999 μ S	0-999 ppm (mg/L)	0.01 – 14.00 pH
ACCURACY	\pm 2% full scale	\pm 2% full scale	\pm 2%	\pm 0.5% F.S.
RESOLUTION	0-999: 0.1 ppm/ μ S; 1000-8500: 1 ppm/ μ S	0-999: 0.1 ppm/ μ S; 1000-8500: 1 ppm/ μ S	1 ppm	0.01 pH / 0.1°C (0.1°F)
ATC	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 60°C / 33 - 140°F)
CALIBRATION	Digital to any point	Digital to any point	Analog to any point	Digital to any point
SET POINT	On-screen buttons	On-screen buttons	On-screen buttons	On-screen buttons
RELAY CONTROLS	Two (upper and lower limit)	Two (upper and lower limit)	Simple switch, user-defined set point	Two (upper and lower limit)
ALARM	Two dependent alarms (max. and min)	Two independent alarms (max. and min)	Optional setting	Optional setting
DISPLAY	Bright, tri-color 5/8" L.E.D. display	Bright, tri-color 5/8" L.E.D. display	Bright 5/8" L.E.D. display	Bright 5/8" L.E.D. display
PROBES	1/2" threaded NPTF, 3 m (9.8 ft) cable	1/2" threaded NPTF, 3 m (9.8 ft) cable	2 x 1/2" NPTF, 3 m (9.8 ft) cable	3/4" Electrode, 3 m (9.8 ft) cable
POWER SOURCE	AC 110V / 220V	AC 110V / 220V	AC 110V / 220V	AC 110V / 220V
DIMENSIONS	7.2 x 7.2 x 10.2 cm (2.8 x 2.8 x 4.0 in)	7.1 x 7.1 x 11.1 cm (2.8 x 2.8 x 4.4 in)	9.4 x 9.4 x 12.5 cm (3.7 x 3.7 x 4.5 in)	7.2 x 7.2 x 11.1 cm (2.8 x 2.8 x 4.4 in)
WEIGHT	436 g (15.4 oz)	241 g (8.5 oz)	569 g (1 lb 4.1 oz)	235 g (8.3lbs)

Protective cover also available (model CC-1)



The SP-1 sensor is compatible with:
PS-100, PS-200, PS-202

The SP-1-PSC sensor is compatible with:
PSC-150, PSC-154, CIC-152






All controllers include a TDS/EC sensor(s), the power cable, sensor cable and mounting brackets.



Monitors






	PM-1/PM-2	QC-1	SM-1	DM-1	DM-2/DM-2EC
		<p>Quick Check Monitor</p>	<p>Single TDS Monitor</p>	<p>Dual TDS Monitor</p>	<p>Dual TDS Monitor</p>
	<ul style="list-style-type: none"> PM-1 : OEM single line internal TDS monitor. PM-2: External single line TDS monitor. Includes a light and optional alarm that alerts the user service is required when the TDS level reaches the set-point User-defined set points Red or yellow warning lights Audible alarm (steady beep) 	<ul style="list-style-type: none"> With the push of a button, the unit displays a green or red light, indicating good water quality or that service is required, respectively Tests for TDS or conductivity levels Eight programmable set points (by dip switch) Bright LED lights Installs quickly and easily Simple to use Comes equipped with 1/4" T-fitting (also available with 3/8" or 1/2") 	<ul style="list-style-type: none"> Displays the TDS level of a single water line Works with the push of a button Auto-off function conserves battery power; unit shuts off automatically after 10 minutes of non-use Comes equipped with 1/4" T-fitting (also available with 3/8" or 1/2") 	<ul style="list-style-type: none"> Displays TDS levels of the feed water and product water with in & out sensors A crucial device for any water filter system Great instant check for system performance Comes equipped with 1/4" T-fittings (also available with 3/8" or 1/2") Installs in minutes 	<ul style="list-style-type: none"> ALL OF THE BENEFITS OF THE DM-1, PLUS: A large, easy-to-read LCD display Splashproof housing Shielded, water-resistant cables Sliding bracket with variable mounting options Sleek design Longer sensor cables Digital calibration Optional 12V AC power adapter
RANGE	0-200 ppm	0-5000 ppm EC: 0-9999 μ S	0-9990 ppm	0-9990 ppm	0-9990 ppm EC: 0-9999 μ S
ACCURACY	\pm 2%	\pm 3%	\pm 2%	\pm 2%	\pm 2%
RESOLUTION	n/a	n/a	0-999: 1 ppm; 1000-9990: 10 ppm	0-999: 1 ppm; 1000-9990: 10 ppm	0-999: 1 ppm; 1000-9990: 10 ppm
ATC	Yes (1 - 65°C / 33 - 149°F)	n/a	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)
CALIBRATION	Factory calibrated only	Factory calibrated only	Analog to any point	Analog to any point	Digital to any point
SET POINT	Set by dip switch	Eight options (max 50 ppm / 100 μ S)	n/a	n/a	n/a
ALARM	Lights and audible alarm	Red/green light (no audible alarm)	n/a	n/a	n/a
SENSOR	1/4" quick connect	1/4" quick connect	1/4" quick connect	2 x 1/4" with quick connect	2 x 1/4" quick connect
SENSOR CABLE LENGTH	62.86 cm (24.75 in) shielded cable	62.2 cm (24.5 in) shielded cable	62.2 cm (24.5 in)	62.2 cm (24.5 in)	116.8 cm (46 in) shielded cable
POWER SOURCE	AC 110V / 220V	4 x 1.5V button cell (LR44)	2 x 1.5V button cell (LR44)	2 x 1.5V button cell (LR44)	2 x AA batteries
BATTERY LIFE	n/a	Approx. 1 year	Approx. 1,000 hours of usage	Approx. 1,000 hours of usage	Approx. 750 hours of usage
DIMENSIONS	9.1 x 7.1 x 4 cm (3.6 x 2.8 x 1.6 in)	7.6 x 2 x 4.7 cm (3 x .8 x 1.9 in)	7.6 x 2 x 4.7 cm (3 x .8 x 1.9 in)	7.6 x 2 x 4.7 cm (3 x .8 x 1.9 in)	11.6 x 6.8 x 1.8 cm (4.6 x 2.6 x .7 in)
WEIGHT	275 g (9.7 oz)	39.7 g (1.4 oz)	79.4 g (2.8 oz)	79.4 (2.8 oz)	201.3 g (7.1 oz)



TRM-1	LSM-100	LDM-100R	FM-2	FLM-3
Triple TDS Monitor	Large Display Monitor	Rejection Dual Monitor	Filter Monitor	Flow Meter
				
<ul style="list-style-type: none"> • Three-line TDS monitor • Ideal for multi-system applications, such as RO/DI • Displays TDS levels at three points, with three sensors • Comes equipped with 1/4" T-fittings (also available with 3/8" or 1/2") • Installs in minutes 	<ul style="list-style-type: none"> • Commercial TDS/EC monitor with large easy to read display • 1/2" sensor probe makes it ideal for large scale systems • Reads ppm, ppt, μS and mS • Extended battery life for continuous monitoring • Includes sensor probe and batteries 	<ul style="list-style-type: none"> • Monitor the efficiency of your commercial RO system • Dual line TDS/EC displays feed and product water • Automatically calculates the % rejection • Extended battery life for continuous monitoring • Includes two sensor probes and batteries 	<ul style="list-style-type: none"> • 5-stage filter monitor with 5 independent timers and volumizers • LED faucet indicator disc • Measures time and volume for up to 5 stages • Auto-off function conserves batteries • Timer counts down in months or days (programmable) • Volumizer counts up in liters or gallons (programmable) • Modern design is perfect for any kitchen 	<ul style="list-style-type: none"> • Monitors flow rates in LPM or GPM • Tracks total liters or gallons used • Programmable alarm indicates overage • Large, easy-to-read LCD display • Unique design is perfect for under-the-sink or countertop systems
0-9990 ppm	TDS: 0-9999 ppm (mg/L); 0-10.0 ppt (g/L) EC: 0-9999 μ S; 0-20.00 mS	TDS: 0-9999 ppm (mg/L); 0-10.0 ppt (g/L) EC: 0-9999 μ S; 0-20.00 mS	0.8-8.0 LPM/0.2-2.1 GPM	0.8-8.0 LPM/0.2-2.1 GPM; 0-99999 g/l
\pm 2%	\pm 2%	\pm 2%	\pm 1%	\pm 10%
0-999: 1 ppm; 1000-9990: 10 ppm	0-999: 1 ppm; 1000-9990: 10 ppm	0-999: 1 ppm; 1000-9990: 10 ppm	1 day/month; 1 gallon/liter	0.1 LPM/GPM; 1 g/l
Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)	Yes (1 - 65°C / 33 - 149°F)	n/a	n/a
Analog to any point	Digital to any point	Digital to any point	n/a	n/a
n/a	n/a	n/a	Fully programmable	Fully programmable
n/a	n/a	n/a	Beep	Beep
3 x 1/4" quick connect	1/2" NPT threaded	1/2" NPT threaded	1/4" quick connect	1/4" quick connect
62.2 cm (24.5 in)	3 m (9.8 ft) cable	3 m (9.8 ft) cable	93 cm (36.6 in)	n/a
2 x 1.5V button cell (LR44)	2 x 1.5V AA batteries	2 x 1.5V AA batteries	2 x 1.5V AA batteries	2 x 1.5V AA batteries
Approx. 1000 hours of usage	Approx. 2 years	Approx. 2 years	Approx. 18 months	Approx. 18 months
7.6 x 2 x 4.7 cm (3 x 0.8 x 1.9 in)	12 x 7.5 x 2.6 cm (4.7 x 3 x 1 in)	12 x 7.5 x 2.6 cm (4.7 x 3 x 1 in)	10 x 6.3 x 2.3 cm (4 x 2.5 x 0.9 in)	6.6 x 9.0 x 6.3 cm (2.6 x 3.5 x 2.5 in)
88 g (9 oz)	198 g (7 oz)	198 g (7 oz)	119 g (4.2 oz)	207 g (7.3 oz)



Sensors

Replacement Probes				
SP-P5	SP-C2	SP-C5	SP-P10	SP-1/SP-1-PSC
				
<p>HM-500/HM-200 Replacement pH Probe</p> <ul style="list-style-type: none"> • Glass sensor and reference tube, thermistor • Includes storage solution • Easy assembly for Hydro Master • Meter must be calibrated after attaching new sensor 	<p>HM-200 Replacement Probe</p> <ul style="list-style-type: none"> • Platinum sensors • Thermistor • Easy assembly for Hydro Master • Meter must be calibrated after attaching new sensor 	<p>HM-500 Replacement Probe</p> <ul style="list-style-type: none"> • Platinum sensors • Thermistor • Easy assembly for Hydro Master • Meter must be calibrated after attaching new sensor 	<p>PPH-1000 Replacement pH Probe</p> <ul style="list-style-type: none"> • Glass sensor and reference tube, thermistor • 3/4" Industrial Type • Easy assembly • Meter must be calibrated after attaching new sensor 	<p>TDS/EC Sensor Probe for Panel Mounted Controllers</p> <ul style="list-style-type: none"> • High quality, durable plastic construction • Stainless steel sensors • Probe: 1/2" threaded NPTF (detachable) • Cable: 3meter (9.8 ft) shielded cable • Connector: 4-pin • Thermistor: Yes

SP-5	SP-C3	SP-C1	SP-P2	SP-O2
				
<p>Single TDS Sensor Probe</p> <ul style="list-style-type: none"> • Stainless steel sensors • Probe: 1/4" • Cable: 120 cm (47 in) • Connector: 4-pin • Thermistor: Yes • Sensors have unlabeled green wrap 	<p>COM-300 Replacement pH with EC Probe</p> <ul style="list-style-type: none"> • Glass sensor and reference tube, thermistor • Includes storage solution • Easy assembly • Meter must be calibrated after attaching new sensor 	<p>COM-100 Replacement EC Probe</p> <ul style="list-style-type: none"> • Platinum sensors • Thermistor • Easy assembly • Meter must be calibrated after attaching new sensor 	<p>PH-200 Replacement pH Probe</p> <ul style="list-style-type: none"> • Glass sensor and reference tube, thermistor • Includes storage solution • Easy assembly • Meter must be calibrated after attaching new sensor 	<p>ORP-200 Replacement ORP Probe</p> <ul style="list-style-type: none"> • Platinum sensor and glass reference tube, thermistor • Includes storage solution • Easy assembly • Meter must be calibrated after attaching new sensor

What is pH?

pH (potential of hydrogen) is an indication of a substance's acidic or alkaline properties.



The higher the pH, the more basic it is, and the lower the pH, the more acidic it is. A pH level of 7.0 is neutral.


SB-1500PRO (Salt meter)


- Salt meter with measuring spoon (percentage of salt)
- Ideal for pools, saltwater aquariums and food preparation
- Large LCD display – horizontal angle for easy viewing
- Waterproof housing
- Automatic Temperature Compensation

SB-2000PRO (Salt Tester)


- Intelligent automated measurement
- Ideal for pools, saltwater aquariums and good preparation
- Auto Power On and Auto Shut-Off after 30 seconds
- Waterproof housing
- Automatic Temperature Compensation ATC to 25°C

RANGE	0.01% to 10.0% (0ppm to 100,000ppm with NaCl)	0.01% to 10.0%
TEMP. RANGE	1 - 99°C / 33 - 210°F (ATC Range)	1 - 99°C / 33 - 210°F (ATC Range)
RESOLUTION	0.1°C/°F / 0.01% (0.01% - 3.0%), 0.1% (3.0% - 10.0%)	0.1%
ACCURACY	Temp: ± 1°C / 33°F ± 0.1% up to 2%; ± 0.2% up to 3%; ± 0.3% up to 4%, etc.	± 0.1- 0.5%
CALIBRATION	Factory calibrated	Factory calibrated
ELECTRODE	Platinum Sensor	Platinum Sensor
HOUSING	Waterproof	Water-Resistant
POWER SOURCE	3 X 1.5V batteries (included LR44 button cell type batteries)	2 X 1.5V batteries (included AAA batteries)
DIMENSIONS	21.4 X 3.4 X 3.4 cm (8 x 1 x 1 in)	17.1 X 2.5 X 2.45 cm (7 x 1 x 1 in)
WEIGHT	81 g (include batteries), 2.9 oz	66 g (include batteries), 2.3 oz

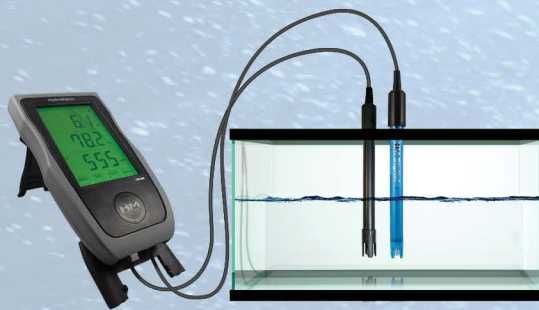
Tips For Better Testing

- Always read the instruction manual prior to use.
- Always be sure an instrument is properly calibrated. ORP and pH meters need to be calibrated frequently. TDS and EC meters will retain their calibration longer.
- All HM Digital products are factory calibrated. Recalibration may be required depending upon measurement parameters.
- Never touch a sensor pin, electrode or reference cell. Skin oils will affect readings.
- Always lightly swirl a meter in the water to dislodge any trapped air bubbles.
- There are many factors that affect water testing, such as water pressure and static electricity. Minor fluctuations or discrepancies in readings are normal.
- Never store an instrument in high heat or humidity.



HydroMaster

HM-500



- Continuous Monitor
- Measures pH/EC/TDS/Temp
- Wall Mount/Benchtop/Portable
- High and low alarm set points
- Stores up to 20 readings
- Superior quality probes
- Brightly-lit green display
- Rechargeable battery
- Touchscreen
- RF Resistant
- pH and EC/TDS probes

HM-200



- Measures pH/EC/TDS/Temp
- Stores up to 20 readings
- Portable handheld
- Durable rubber boot
- LCD Backlight
- 2 AA batteries
- RF Resistant
- pH and EC/TDS probes

RANGE	0 - 14 pH 0 - 9999 μ S / 0 - 20 mS 0 - 9999 ppm / 0 - 10 ppt	0 - 14 pH 0 - 9999 μ S / 0 - 20 mS 0 - 9999 ppm
TEMP. RANGE	0-55 °C / 32 - 130 °F	0-55 °C / 32 - 130 °F
RESOLUTION	pH: 0.1 Temp: 0.1°C / 0.1 °F TDS: 0.1 ppm (0 - 99.9 ppm); 1ppm (100 - 999 ppm); 10 ppm (1000 - 9990 ppm) EC: 0.1 μ S (0 - 99.9 μ S); 1 μ S (100 - 999 μ S); 10 μ S (1000 - 9990 μ S); 0.01 mS (0.01 - 20.00 mS)	pH: 0.1 Temp: 0.1°C / 0.1 °F TDS: 0.1 ppm (0 - 99.9 ppm); 1ppm (100 - 999 ppm); 10 ppm (1000 - 9990 ppm) EC: 0.1 μ S (0 - 99.9 μ S); 1 μ S (100 - 999 μ S); 10 μ S (1000 - 9990 μ S); 0.01 mS (0.01 - 20.00 mS)
ACCURACY	\pm 0.1 pH / \pm 2% EC, TDS / \pm 1°C/°F	\pm 0.1 pH / \pm 2% EC, TDS / \pm 1°C/°F
CALIBRATION	Digital	Digital
ELECTRODE	ABS with Platinum electrodes for EC / Single Junction pH Sensor	ABS with Platinum electrodes for EC / Single Junction pH Sensor
HOUSING	Water-resistant	Water-resistant
POWER SOURCE	AC 110V - 220V / Rechargeable Lithium Ion Battery	2 x AA batteries
DIMENSIONS	8 x 4 x 1.4 in / 20 x 11 x 3.6 cm	5.5 x 2.6 x 1.1 in / 14 x 6.6 x 2.8 cm
WEIGHT	15.2 oz / 0.43 kg for body / 5 oz / 140g for 2 probes	7 oz / 0.2 kg for body / 5 oz / 140g for 2 probes

Refractometers



RCM-1000BT (Coffee Refractometer)



- Brix, TDS and Temp measurement
- Auto backlight and Large LCD display screen
- Waterproof housing
- Automatic Temperature Compensation
- Includes a silicone protective cover
- Bluetooth with available smartphone app

SCM-1000 (Sugar Refractometer)



- Handheld digital refractometer
- Fast-acting with a large LCD display (with auto backlight)
- Data storage and recall (up to 20 measurements)
- Automatic Temperature Compensation
- Waterproof housing
- Includes a silicone protective cover
- Optional bluetooth with available smartphone app

RANGE	Brix 0.0 - 26.0% TDS: 0.0 - 23.0% Temp: 0° - 70° C / 32 - 158°F	Brix 0.0 - 55.0%
TEMP. RANGE	10 - 60°C / 50 - 140°F (ATC range)	10 - 60°C / 50 - 140°F (ATC range)
RESOLUTION	Brix 0.01% TDS: 0.01% Temp: 0.1°C / 32°F	Brix 0.1%
ACCURACY	Brix ± 0.2% TDS: ± 0.2% Temp: ± 0.1°C / 32°F	Brix ± 0.2%
CALIBRATION	Digital (with distilled water)	Digital (with distilled water)
SENSOR	Optical glass prism	Optical glass prism
HOUSING	Waterproof	Waterproof
POWER SOURCE	2 x AAA batteries	2 x AAA batteries
DIMENSIONS	5.8 x 3.6 x 12.2 cm (2.3 x 1.4 x 4.8 in)	5.8 x 3.6 x 12.2 cm (2.3 x 1.4 x 4.8 in)
WEIGHT	116 g (4 oz)	116 g (4 oz)

APPLICATIONS:

- Coffee
- Espresso
- Dairy
- Beer
- Wine
- Carbonated Beverage
- Brewing
- Fruit/Juice
- Hydroponics
- Laboratory
- Farming
- Quality Control

Agriculture

Alternative Health

Aquariums & Aquaculture

Car & Window Washing

Deionization

Food & Coffee Service

Hydroponics

Pools & Spas

Pharmaceutical & Medical

Reverse Osmosis

Water Purification

Water Treatment

TDS:	Total Dissolved Solids		
PPM:	Parts Per Million	1 ppm	0.001 ppt
PPT:	Parts Per Thousand	1 ppt	1000 ppm

EC:	Electrical Conductivity		
μS	micro-Siemens	1 μS	0.001 mS
mS	milliSiemens	1 mS	1000 μS

ex: 2.5 mS (EC) = 2,500 μS

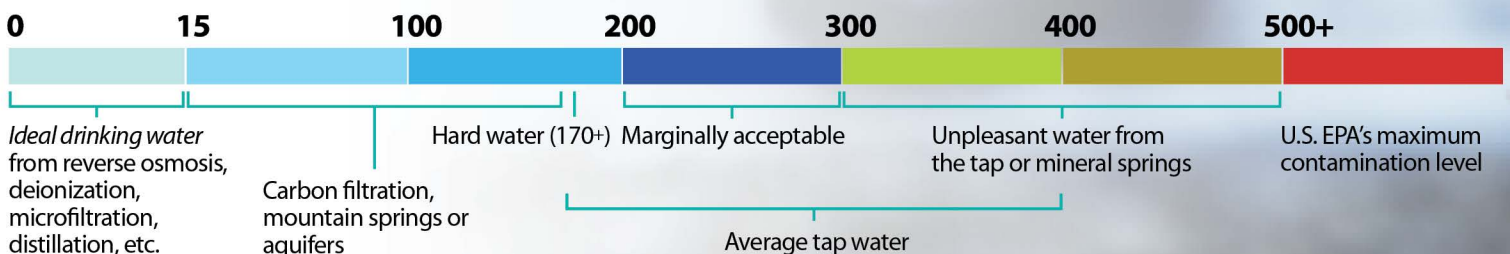
EC to TDS Conversion Factors		
NaCl	Sodium Chloride	0.46-0.51 μS
KCl	Potassium Chloride	0.50-0.53 μS
442™	40% Na ₂ SO ₄ , 40% NaHCO ₃ , 20% NaCl	0.65-0.75 μS

pH	Potential Hydrogen
a measure of the acidity or alkalinity of a solution	

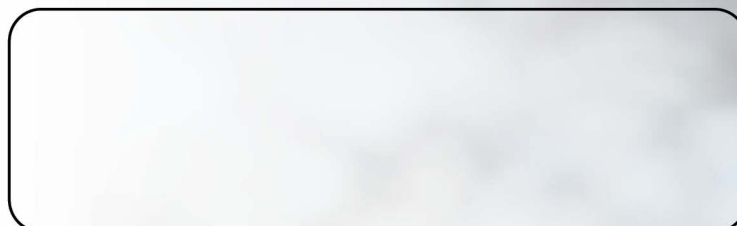
ORP	Oxidation Reduction Potential
a measure of water's ability to oxidize contaminants	

RECOMMENDED TDS LEVELS FOR DRINKING WATER

TDS in parts per million (PPM)



Authorized Distributor



1-310-410-3100
HMDigital.com

