

pH Testers, Meters and Controllers Conductivity Testers, Meters and Controllers TDS Testers, Meters and Controllers Dissolved Oxygen Meters **Temperature Testers and Meters** Pumps Irrigation/Fertilization Controllers

Chemical Test Kits

Solutions



Agricultural Division

Authorized Distributor www.clarksonlab.com

Multiparameter Instruments for pH, EC, TDS and Temperature!

Combo Waterproof pH/EC/TDS/Temperature Tester

are designed for high accuracy pH, EC/TDS and temperature measurements. These technologically cartridge with an extendable cloth junction as well as an EC/TDS graphite electrode that resists contamination by salts and other substances.



Waterproof, Floating % Battery Power Illumination High Accuracy Large Dual-level LCD



OS Ratio out-off olibration		D
Range	HI	98130
рН		0.00 to
EC	0.0	00 to 20.00 n

.32.0 to 140.0°F

TDS
Temp.
or 0.0 to 60.0°C
Accuracy
pH ±0.05
EC/TDS ±2% F.S.
Temp. $\pm 1^{\circ}$ F or $\pm 0.5^{\circ}$ C

pH0.00 to 14.00

EC 0 to 3999 *u*S/cm

	1011101
0.0 to 60.0°C	or 0.0 to 60.0°
	Accuracy
±0.05	pH
±2% F.S.	EC/TDS ±2% F.S
$^{\circ}$ F or $\pm 0.5 ^{\circ}$ C	Temp. $\pm 1^{\circ}$ F or $\pm 0.5^{\circ}$

Rugged Probe

9 V Battery

HI 9813 Portable pH/EC/TDS Meter

rugged replaceable cloth junction probe. Specifically engineered for growing applications, with 0.7 TDS conversion factor. The specially engineered 4-in-1 HI 1285 probe is interchangeable and the nH electrode utilizes a fiber junction and

gel electrolyte which are particularly suitable when used in fertilizer solutions.	COCCIO METO
HI 9813	
pH	
EC	
TDS 0 to 1999 ppm	
Accuracy	-
pH±0.2	Accessories
EC ±2% F.S.	HI 710009Blue pro
TDS ±2% F.S.	rubb

HI 991300 Waterproof 4-in-1 Multiparameter Meter

% Battery Display2 Button Operation display, adjustable EC/TDS ratio. sensor, change the TDS factor and temperature probe houses the pH and conductivity sensor along with an integrated solid state amplifier to eliminate noise and interference.

	HI 991300
Range	
рН	
EC	
TDS	0 to 2000 ppm
Temp	
	or 0.0 to 60.0°C

HI 7	030M					 		ī	ī	ī			1	28	380	0 7	иS	3/0	cm	@	25	°C	cal.	sol.,	230	n
HI 7	031M .		 ı	 ı	ı	 	ı	ı	ŀ	ı			ď	14	113	3 1	иS	3/0	cm	(a)	25	°C	cal.	sol.,	230	r
НІ 7	0442M		í	 í		 ı	í	ı	ı			ı	ı		.18	5Ó	0	pr	m	@	25	°C	cal.	sol.,	230	r
	007M																									

Accuracy

GRO'CHEK Combo pH/EC/TDS/Temperature Monitor : Extra Large Display 12V Power Supply

dual-level backlit LCD to give you instantaneous readings of pH/EC/TDS and temperature. The nicroprocessor provides automatic calibration, automatic buffer selection, automatic temperature compensation, adjustable (3 and adjustable TDS ratio.

HI 9914N4



111 33 1 404	111 991700 //
ange	Range
H	pH
${\tt C}$ 0 to 3999 μ S/cm	EC 0.00 to 20.00 mS/cm
DS 0 to 2000 ppm	TDS 0.00 to 10.00 ppt
emp.	Temp.
or 0.0 to 60.0°C	or 0.0 to 60.0°C
ccuracy	Accuracy
H ±0.05	pH

Temp. $\pm 1^{\circ}$ F or $\pm 0.5^{\circ}$ C **Temp.** $\pm 1^{\circ}$ F or $\pm 0.5^{\circ}$ C

GRO'CHEK Combo 2 Meters in 1 with Large LCD • Professional Sensors pH and TDS or pH and EC meters feature a large LCD for monitoring

pH±0.2 **pH**±0.2Cal. kit (pH 4 & 7, 20 mL, 5 pcs ea.) HI 7061Msol., 230mL

BlackStone BL Series Chemical Metering Pumps • High Quality Material Ideal for Dosing Nutrients & Acids

hese simple and reliable diaphragm pumps are composed of high quali components and incorporate chemical-resistant Teflon® and Kynar® heads and diaphragms. The Blackstone series of pumps are positive displacement solenoid driven, using a minimum number of moving parts, therefore reducing the chance of mechanical failure.



Order the dosing pump according

,	
BL3/U 110/115V, 0.8 gph (2.9 lph)	
BL5/U 110/115V, 1.3 gph (5.0 lph)	
BL7/U 110/115V, 2.0 gph (7.6 lph)	
BL10/U 110/115V, 2.9 gph (10.8 lph)	
BL15/U 110/115V, 4.0 gph (15.2 lph)	
RI 20/II 110/115\/ 4.8 aph (18.3 lph)	

. Pumphead in Kynar®, diaphragm and valve seats in Teflon® glass ball valves and O-Rings in Viton Fittings Polvethylene 5 x 8 mm tubing, 3/8" gas pipeline injection fitting Max. self-priming height 5 feet (1.5 m)



Hanna Instruments has been providing the Hydroponics industry with the highest quality scientific products for over a decade. Once again, Hanna is proud to introduce NEW products to the market, the result of our valuable customers feedback. Hanna products are sold throughout a fine network of distributors across the country, so when you need a scientific product for your hydroponics needs, simply visit your local hydroponics store and ask for a Hanna instrument. Once again, thank you for your continuous support!

For more information or to find a dealer near you call Hanna Instruments Agricultural Division at: 877.694.2662

www.hannainst.com





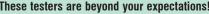




The Widest Selection of pH, EC and TDS Meters Available in the Market Today!

pHep®4 & pHep®5 Waterproof pH & Temperature Testers

he pHep[®]4 and pHep[®]5 include features such as waterproof casing that floats, dual-level LCD. temperature in °C and °F, battery level indicator, replaceable pH electrode cartridge, stability indicator, automatic shut-off and automatic calibration.





Large, Dual-level LCD Stability Indicator % Battery Power Automatic Shut-off

Automatic Calibration eplaceable pH Electrode Cartridge. No Pins to

HI 98127 (pHep®4) Range	HI 98128 (pHep®5) Range
pH 0.0 to 14.0	pH 0.00 to 14.00
Temp.	Temp.
or 0.0 to 60.0°C	or 0.0 to 60.0°C
Accuracy	Accuracy
pH ±0.1	pH±0.05
Temp. $\pm 1^{\circ}$ F or $\pm 0.5^{\circ}$ C	Temp. ±1°F or ±0.5°C
Accessories HI 73127 HI 7004M	

2-Point CalibrationLarge LCD

1700 Hours of Battery Life

Rugged Ergonomic Casing

pHep® pH Tester with 2-Point Calibration

with 0.1 pH accuracy, has 2-point calibration, large LCD, pull out replenishable iunction and 1700 hours of battery life. clogging fiber junction, the new pHep®

meters last much longer.
HI 98107 (pHep®) Range
pH
Accuracy
pH ±0.1



GRO'CHEK pH Stick Tester with Heavy Duty Probe



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The pH GRO'CHEK is an ideal meter for use anywhere liquid nutrient feeding is used. The rugged sensor was designed for mixing and incorporates a cloth renewable junction. The water and shock resistant casing stands up to even harsh greenhouse environments.

•	Rugged, Water Resistant Housing
•	Shock Resistant
•	Replaceable Probe
•	Ideal for Mixing
•	Runs on AA Batteries

Ran	HI 981408
Acci	ıracy
рН	±0.2

Accessories	
	Double junction pH electrode
HI 7004M	 pH 4.01 buffer solution, 230 mL
HI 7007M	 pH 7.01 buffer solution, 230 mL
HI 7061M	 lectrode cleaning solution, 230mL
HI 70000P	 Rinse solution (25 x 20 mL)
HI 70300M .	 Electrode storage solution, 230 mĹ

GRO'CHEK pH Monitor : Waterproof Rugged Housing with Large LCD

The popular GRO'CHEK pH monitor has been updated with a larger, easy-to-read LCD. Waterproof casing guarantees operation after accidental exposure to

water. The professional pH electrode gives you accurate results every time.	prise pier
HI 981401N Range	
pH	
Accuracy	
pH±0.2	

Accessories	
HI 1286	pH electrode with 2 m (7') cable
HI 7004M.	
HI 7007M.	pH 7.01 buffer solution, 230 mL
	Electrode storage solution, 230 mL

GRO'CHEK pH Monitor with Dual-level Backlit LCD

Extra Large Display12V Power Supply The new GRO'CHEK from Hanna has dual-level backlit LCD to give you

instantaneous readings of both pH and temperature. The microprocessor provides automatic calibration, automatic buffer selection and automatic temperature compensation. 0.00 to 14.00

Temp.	32.0 to 140.0°F 0.0 to 60.0°C
Accura	СУ
pH	±0.05
Temp.	±1°F (±0.5°C)

Accessorie													1	0	Λ																			
HI 12930.																																		
HI 7004M																																		
HI 7007M	į,		 į.	í	 	į.	ı		į.	í	ı	 	ı	ı	ı		5	Š	h	p	Н	7	0	1	bι	ıffe	er	S	ol.	. 2	230)	m	L
HI 7007M HI 7010M	í		 ı	í	 	ı	ı		ı	ı	í		ı	ı	ı	ı		۳	ī,	İΗ	1	0	0	1	bι	ıffe	er	S	ol.	. 2	230)	m	L
HI 7061M																																		
HI 70000P																																		
HI 70300M																																		
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HI 9913 Wall Mounting pH & Conductivity Controller • ATC • Alarm Relay

HI 9913 is a 2-in-1 pH and conductivity controller engineered for cost-effective dosage of fertilizer solutions in hydroponics. Two separate mS/cm). The relays are activated when pH exceeds the setpoint or terminals. The operator can adjust two independent proportional settings for pH and conductivity. The time cycle is adjustable from 0 to 90 seconds. while the proportional band is 0 to 2.0 for both pH and EC.



		HI 9913
	Range	
1	рН	
I	EC	.0.00 to 10.00 mS/cm
2	Accuracy	<u> </u>
	рН	±0.02
		. 00/ 50

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DiST®5 & DiST®6 Waterproof EC/TDS/Temperature Testers



waterproof casing that floats, adjustable TDS ratio. temperature in °C and °F, adiustable ß. Automatic unmatched in EC/TDS/Temperature measurement!



% Battery Power Illumina Large, Dual-level LCD Adjustable TDS Ratio

Waterproof, Floating

Automatic Shut-off Automatic Calibration

TDS

TDS

Replaceable Graphite Electrode Cartridge!

lange	HI 98311 (DiST®5)
C	0 to 3999 μS/cm
DS	0 to 2000 ppm
emp	
	or 0.0 to 60.0°C
ccurac	l
C/TDS	±2% F.S.

. .0.00 to 20.00 mS/cm **TDS**0.00 to 10.00 ppt32.0 to 140.0°F or 0.0 to 60.0°C **EC/TDS**±2% F.S. **Temp.** $\pm 1^{\circ}$ F or $\pm 0.5^{\circ}$ C

• 2-in-1: pH and TDS

Fconomical

Alarm Relay

• ATC

HI 9935 Wall Mounting pH & TDS Controller

 \dots ±1°F or ±0.5°C

HI 9935 is a 2-in-1 pH and TDS controller engineered for economical dosage of fertilizer solutions in hydroponics. Two separate setpoints can be user-adjusted from 4 to 7 pH and 900 to 1800 ppm (mg/L). The relays are activated when pH exceeds the setpoint or TDS falls below the desired value. Two pumps or electro-valves can be wired directly to the controller and be powered through the terminals. Independent proportional settings for pH and TDS can be adjusted from 0 to 90 seconds, 0 to 2.0 for pH and 0 to 400 for TDS.



	HI 9935 Range
1	pH0.00 to 14.00
D n	TDS0 to 1999 ppm
4	Accuracy
	pH ± 0.02
	TDS±2% F.S.

HI 7004MpH 4.01 buffer sol.. 230 mL HI 7007MpH 7.01 buffer sol., 230 mL

HI 981409 & HI 981410 : Water Resistant TDS and EC Stick Testers • ATC

The GRO'CHEK TDS and EC stick testers are deal anywhere liquid nutrient feeding is emperature sensor for more rapid readings These testers also feature automatic calibraand rugged housing. The EC and TDS GRO'CHEK testers utilize AA batteries and features an auto shut-off after 5 minutes



HI 981409 ge	HI 981410 Range
0 to 1999 ppm	EC 0.00 to 10.00 mS/cm
ıracy	Accuracy
±2% F.S.	EC ±2% F.S.
4//	

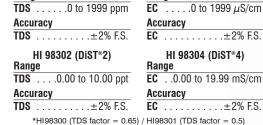
0003301103	
l 1220	EC/TDS probe, L: 240 mm, DIN connector
II 7039M	5000 μS/cm @ 25°C cal. sol., 230 mL
II 7032M	
II 70442M	
II 7061M	Electrode cleaning solution, 230mL
II 70300M	Electrode storage solution, 230 mL
	,

Large LCD

Ruaged Housing

DiST® EC and TDS Testers with ATC

This DiST family of testers utilize a graphite sensor interface for greater accuracy and external temperature sensor for quicker more stable readings. The DiST features a large LCD, BEPS and rugged housing for longer life. HI 98300/HI 98301(DiST®1)* HI 98303 (DiST®3)



GRO'CHEK EC and TDS Monitor

The new EC/TDS GRO'CHEK from Hanna has a dual-level backlit LCD to give you instantaneous readings o both EC/TDS and temperature. The microprocessor provides automatic calibration, automatic buffer temperature compensation.

Dual-level Backlit LCD Adjustable TDS Ratio

Adjustable B

Extra Large Display

TDS±2% F.S. **Temp.** $\dots \pm 1^{\circ}F$ ($\pm 0.5^{\circ}C$)

TDS 0 to 2000 ppm **Temp.** 32.0 to 140.0°F **EC**±2% F.S.

EC .		.±2% F
TDS		±2% F
Temi) ±1°F	$(\pm 0.5^{\circ})$

Accessories

GRO'CHEK EC and TDS Monitors with Large LCD

The popular GRO'CHEK EC/TDS monitor has been upgraded with a larger, easy-to-read LCD. Plus the waterproof casing guarantees operation after accidental water exposure. The professional pH electrode gives you accurate results every time.



Range	HI 983301N	
TDS	0 to	1990 ppm
Accuracy		
TDS		.±2% F.S.

Accuracy