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Star Series Specifications



Orion 4-Star pH/ISE

Portable Meter (Cat. No. 1215000)
Portable Meter Kit (Cat. No. 1215001)

- Durable, waterproof, IP67 meter stands up to the most demanding field applications while delivering over 2,000 hours of continuous operation.
- Ergonomic design for comfortable handling
- Accepts ISFET (Ion Selective Field Effect Transistor) electrodes
- SMART STABILITY™ and SMART AVERAGING™ functions for automatically optimized accuracy, precision and response time
- Storage of up to 10 password protected methods for easy retrieval of operation procedures
- Simultaneous display of pH or ISE and temperature measurements

Specifications	
pH	
Readout Range / Resolution	-2.000 to 19.999 or 0 to 14 in aqueous solutions / 0.1,0.01,0.001
Relative Accuracy	± 0.002
SMART STABILITY™ and SMART AVERAGING™	Resolution dependent / automatic
AUTO-CAL™ and/or Manual Calibration	1 to 5 points; US/NIST, DIN, and custom buffers recognized
ISE	
Range / Resolution	0 to 19900 / 1,2, or 3 significant digits
Relative Accuracy	± 0.2 mV or 0.05%, whichever is greater
SMART STABILITY™ and SMART AVERAGING™	Resolution dependent / automatic
Units	M, mg/L, %, ppb, or no units
# ISE Cal points	1 to 5
Special ISE Calibration Features	Linear point to point, selectable auto-blank non-linear, low concentration range
mV	
Range – mV / RmV	± 1999.9
ORP	E _H autocalibration to standard hydrogen electrode
Resolution	0.1
Relative Accuracy	± 0.2 mV or 0.05%, whichever is greater
Temperature	
Range / Resolution	-5 to 105 °C / 0.1 up to 99.9 °C, 1.0 over 99.9 °C
Relative Accuracy	± 0.1 °C
Temperature Compensation	Auto/Manual
Display	Custom backlit LCD, for easy viewing
Inputs/Outputs	
Sensor Inputs	pH/ISE - BNC; ATC-miniDIN-Locking; Reference-Pin tip (all waterproof)
Solid State pH Sensor	ISFET - miniDIN - locking
Communications	Waterproof bi-directional RS232 - Stereo jack, optional USB interface Cable
Special GLP Software Features	
# Of Data Logging Points	200 points by time, stability or manual read with time/date stamp
Calibration Log	Last 10 Calibrations
User Method Storage	10 Saved
Advanced Self-test and Diagnostics	YES
GLP Electrode Verification	YES
Password Protection	YES
Internet Software Updates / Downloadable Methods	YES
21 CFR Part 11 Software Package	Optional
Power	4 x AA batteries, powerless date protection
Regulatory and Safety	CE, CSA, UL, TÜV, FCC Class A limits
Environmental Operating Conditions	
Ambient Operating Temperature	5 to 45 °C
Relative Humidity	5 to 85% Non-Condensing
IP Rating	IP67, waterproof and dustproof
Warranty	36 months (from date of purchase)

Above data generated under optimal/controlled circumstances.

Note: ISFET capability available in Fall 2005

pH/ISE Portable Meter Kit (1215001) Includes:

Cat. No.	Description
1215000	4-Star pH/ISE portable meter
9107BNMD	Low maintenance Triode™ pH/ATC electrode
910060	pH storage solution, 5x60 mL
1210004	Hard field case
910410	pH 4.01 buffer, 10 pack
910710	pH 7.00 buffer, 10 pack
911010	pH 10.01 buffer, 10 pack

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Orion 4-Star

pH/ISE

Portable Meter (Cat. No. 1215000)

Portable Meter Kit (Cat. No. 1215001)

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