

Star Series Specifications



Orion 4-Star pH/Conductivity

Portable Meter (Cat. No. 1217000)
Portable Meter Kit (Cat. No. 1217001)

- Durable, waterproof, IP67 meter stands up to the most demanding field applications while delivering over 2,000 hours of continuous operation.
- Reliable and accurate pH, conductivity, resistivity, salinity, TDS and temperature measurements for soil and water analysis applications.
- SMART STABILITY™ and SMART AVERAGING™ functions for automatically optimized accuracy, precision and response time
- Accepts ISFET (Ion Selective Field Effect Transistor) electrodes
- Meets all U.S. Pharmacopeia (USP) requirements
- Simultaneous display of pH, Conductivity 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
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
Conductivity	
Range	0.000 to 3000 mS/cm, auto resolution with cell constant dependence
Resolution	4 significant digits down to 0.001 µS/cm, cell constant dependent
Relative Accuracy	0.5% ± 1 digit or 0.01 µS/cm, whichever is greater
Cell Constant	0.001 to 199.9
Cell Compatibility	2 Cell, 4 Cell, Planar Cell
SMART STABILITY™ and SMART AVERAGING™	Resolution dependent / automatic
DirectCal™ / AUTO-CAL™	1 to 5 points / 1 to 3 points
Resistivity	
Range / Resolution	0.0001 to 100 Megohm / Auto resolution
Relative Accuracy	0.5 % ± 1 digit
Salinity	
Range / Resolution	0.01 to 80.0 ppt NaCl equivalent, 0.01 to 42ppt practical salinity / 0.01
Relative Accuracy	± 0.1 ± 1 digit
TDS	
Range / Resolution	0 to 19999 / 1 mg/L
Relative Accuracy	± 0.5 % ± 1 digit
Adjustable TDS Factor	0.00 to 10.00
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	Cond (nLF, linear 0.0 to 10.0% / °C); pH (auto/manual)
Display	
Custom backlit LCD, for easy viewing	
Inputs/Outputs	
Sensor Inputs	Conductivity-miniDIN - Locking; ATC-miniDIN-Locking; pH - BNC; (all waterproof)
Solid State pH Sensor	ISFET
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

Above data generated under optimal/controlled circumstances.

Specifications

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.

pH/Conductivity Portable Meter Kit (1217001) Includes:

Cat. No.	Description
1217000	4-Star pH/Conductivity portable meter
9107BNMD	Waterproof pH Triode™, DIN
910060	pH storage solution, 5x60 mL
080045	EP protective sleeve
1210004	Hard field case
204947-001	Beaker
013005MD	Conductivity cell, 1.5m cable
011007	Conductivity/TDS standard, 1413 µS/cm, 5x60 mL
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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