

Orion® 5-Star Portable pH/ORP/ISE/DO/Conductivity Multimeter Highly Advanced *Waterproof* Series

3 Year Warranty

Item Number: 1219000

- Easy user friendly 3-button function
- Balanced comfortable handling
- Bright, backlit LCD display with ready indication
- Simultaneous pH / ISE (Ion Selective Electrodes), Dissolved Oxygen, conductivity and temperature measurements in one hand-held unit
- Stores up to 10 methods with password protection

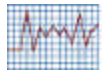


This waterproof, battery-operated Orion pH / Dissolved Oxygen / ISE / conductivity meter stands up to the most demanding R&D and QA/QC applications and delivers over 2,000 hours of continuous operation. The rugged Orion meter offers a full complement of GLP-related features – including available 21 CFR Part 11 software.

Optional 1 to 5 point calibration for pH, direct ion and conductivity measurement ensures a high level of accuracy even at the extremes of concentration; automatic salinity correction for DO when measuring conductivity simultaneously. SMART STABILITY™ and SMART AVERAGING™ functions simplify the measurement process. Backlight ensures legible display for real-world situations. You can record and store up to 10 setup parameters and calibrations and download additional methods and software updates via the Web.

Additional features

- IP67 waterproof (may be immersed for up to one hour with no water incursion)
- Waterproof BNC pH electrode and ISE connectors and waterproof mini DIN locking DO and conductivity probe connectors
- Automatic or manual pH calibration with 1 to 5 calibration points
- Auto-buffer-recognition of NIST/US and DIN buffers
- Uses polarographic DO probe
- Automatic or manual temperature compensation
- Manual ISE calibration with 1 to 5 calibration points
- Point-to-point ISE calibration, high and low concentration range
- Automatic blank correction
- Automatic barometric pressure compensation
- Auto-read/hold function
- GLP IQ/OQ included
- Self-diagnostics
- 200 point datalogger which is downloadable to printer or computer via RS232 or optional USB accessory
- CE, CSA, UL, TÜV and FCC Class A limits approved
- Universal power adapter for worldwide operation
- Three-year replacement warranty for the Orion meter



Specification

pH	Range:	-2.000 to 19.999 or 0 to 14 in aqueous solutions
	Resolution:	0.1/0.01/0.001
	Relative accuracy:	+/- 0.002
ISE	Range:	0 to 19900
	Units:	M, mg/L, %, ppb, or no units
	Relative accuracy:	+/- 0.2mV or 0.05%, whichever is greater
	Resolution:	1, 2, or 3 significant digits
	mV/RmV:	+/-1999.9
DO	Concentration:	0.00 to 90.00mg/L
	Relative accuracy:	0.2 mg/L
	% Saturation:	0.0 to 600%
	Salinity factor:	0 to 45 ppt
	Barometric pressure:	450-850 mm Hg
Conductivity	Range:	0.000 to 3000 mS/cm, auto resolution with cell constant dependence
	Resistivity:	0.0001 to 100 Megohms
	Salinity:	0.01 to 80.0 ppt NaCl equivalent
	TDS:	0 to 1999
	Reference temperature:	15°, 20° or 25°(default), autoranging
	Cell Constant:	0.001 to 199.9
	Temperature:	-5 to 105°C
Communication:	Waterproof bi-directional RS232 – Stereo jack, optional USB interface cable	
Power:	4xAA batteries, powerless data protection	
Operating Temperature:	5 to 45 °C	

Application Kits

Complete application kits including the Orion meter, electrode, standards, solutions and accessories are available for your convenience

Applications	Item Number
Multiparameter for General Application	1219001