

The easy way to measure pH and dissolved oxygen levels for water and process quality

Thermo Scientific Orion

4-Star pH/RDO® Portable Meter and Sensors



Portable Optical RDO (Rugged Dissolved Oxygen) System with pH Capability

- Simultaneous display of pH, dissolved oxygen and temperature on the backlit LCD
- Uses optical DO technology
- No membranes to change – once-a-year cap replacement
- Calibrate for dissolved oxygen using water-saturated air, air-saturated water, zero point or a custom point with Winkler titration
- Built-in barometer for automatic pressure correction for dissolved oxygen readings with option for manual correction
- pH calibration of up to 5 points with calibration alarm and automatic buffer recognition of USA, NIST and DIN buffers
- Temperature calibration capability
- Data storage for 750 data sets with time and date stamping
- RS232 port for easy data downloading and software updates
- IP67-rated meter housing and IP68-rated RDO sensor
- Four AA batteries provide over 1000 hours of operation in AUTO-READ™ mode
- 3-year warranty on meter and RDO sensor body
- 1-year warranty on optical cap

Thermo Scientific Orion 4-Star RDO Portable Meter

Specifications			Ordering Information	
DO	Concentration Range	0.00 to 20.0 mg/L	Portable Meter Only	
	Resolution	0.01, 0.1 mg/L	Cat. No.	Description
	Relative Accuracy	±0.1 mg/L up to 8 mg/L; ±0.2 mg/L from 8 to 20 mg/L	1213310	4-Star pH/RDO® portable meter only
	% Saturation Range	0.0 to 200%	Portable Meter Kits	
	Resolution	0.1, 1%	Cat. No.	Description
	Relative Accuracy	± 2%	1213311	4-Star pH/RDO portable meter, RDO sensor with 3 meter cable, stainless steel RDO sensor guard, optical cap, calibration sleeve, pH/ATC Triode™ with 3 meter cable (9107WMMD), batteries and user guide
	Barometric Pressure Correction	450 to 850 mm Hg, automatic or manual	1213312	4-Star pH/RDO portable meter, RDO sensor with 6 meter cable, stainless steel RDO sensor guard, optical cap, calibration sleeve, pH/ATC Triode with 6 meter cable (9107WLMD), batteries and user guide
	Calibration Features	Water saturated air, air saturated water, manual (Winkler) and zero point	Accessories	
pH	Sensor Type	RDO optical	Cat. No.	Description
	Range	-2.000 to 19.999	087001	Replacement optical cap
	Resolution	0.1, 0.01, 0.001	087010MD	RDO optical sensor with 3 meter cable, stainless steel guard, calibration sleeve and optical cap
mV, RmV, ORP	Relative Accuracy	± 0.002	087020MD	RDO optical sensor with 6 meter cable, stainless steel guard, calibration sleeve and optical cap
	Range	± 1999.9 mV	087030MD	RDO optical sensor with 10 meter cable, stainless steel guard, calibration sleeve and optical cap
	Resolution	0.1 mV	087050MD	RDO optical sensor with 15 meter cable, stainless steel guard, calibration sleeve and optical cap
Temperature (with RDO sensor)	Relative Accuracy	± 0.2 mV or 0.05% of reading, whichever is greater	087100MD	RDO optical sensor with 30 meter cable, stainless steel guard, calibration sleeve and optical cap
	Range	0 to 50 °C	087002	Replacement stainless steel RDO optical sensor guard
	Resolution	0.1 °C	087003	Calibration sleeve for RDO optical sensor
Temperature (when RDO sensor is not used)	Relative Accuracy	± 0.3 °C	9107WMMD	pH/ATC Triode, 3 meter cable, epoxy body, low-maintenance gel
	Range	-5 to 105 °C	9107WLMD	pH/ATC Triode, 6 meter cable, epoxy body, low-maintenance gel
	Resolution	0.1 up to 99.9 °C, 1.0 over 99.9 °C		
	Relative Accuracy	±0.1 °C		

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S-4STRDOPT-E 1108 RevA

Environmental Instruments
Water Analysis Instruments

North America
166 Cummings Center
Beverly, MA 01915 USA
Toll Free: 1-800-225-1480
Tel: 1-978-232-6000
Dom. Fax: 1-978-232-6015
Int'l Fax: 978-232-6031

Europe
P.O. Box 254, 3860 AG Nijkerk
Wallerstraat 125K, 3862 BN
Nijkerk, Netherlands
Tel: (31) 033-2463887
Fax: (31) 033-2460832

Asia Pacific
Blk 55, Ayer Rajah Crescent
#04-16/24, Singapore 139949
Tel: 65-6778-6876
Fax: 65-6773-0836

www.thermo.com/water

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