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35 Vantage Point Drive Rochester, NY 14624
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Thermo Scientific Orion 5-Star Plus

pH/ORP/Cond/DO Portable Meter

The Thermo Scientific Orion 5-Star Plus multi-parameter meter offers advanced meter functions for accurate measurements in the field.



Features and Benefits

- Simultaneous display of pH, mV or ORP; conductivity; dissolved oxygen and temperature measurements on the backlit LCD
- IP67-rated housing for waterproof and dustproof protection
- The Thermo Scientific Orion SMART STABILITY™ and SMART AVERAGING™ functions for automatically optimized accuracy, precision and response time
- Temperature calibration capability
- pH calibration of up to 5 points with calibration alarm and automatic buffer recognition of USA, NIST and DIN buffers
- Conductivity / TDS / salinity / resistivity calibration of up to 5 points and reading reference temperatures of 5 °C, 10 °C, 15 °C, 20 °C or 25 °C
- Built-in barometer for automatic pressure correction with option of manual correction for dissolved oxygen measurements
- Automatic salinity correction for dissolved oxygen measurements from the conductivity probe reading
- Separate dissolved oxygen membrane and solution temperature displays and calibrations
- Full complement of GLP-related features including Star Navigator 21 software
- Storage of up to 10 individually password-protected methods for easy retrieval of operation procedures
- Data storage for 500 data sets with time and date stamping
- RS232 port for easy data downloading and software updates
- Four AA batteries deliver over 2,000 hours of continuous operation
- 3 year meter warranty

Thermo Scientific Orion 5-Star Plus pH/ORP/Cond/DO Portable Meter



pH	Range	- 2.000 to 19.999
	Resolution	0.1, 0.01, 0.001
	Relative Accuracy	± 0.002
mV	Range	± 1999.9
	Resolution	0.1
	Relative Accuracy	± 0.2 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 Constants	0.001 to 199.9
Resistivity	Range	0.0001 to 100 Megohm
	Resolution	Automatic
	Relative Accuracy	0.5 % ± 1 digit
Salinity	Range	0.1 to 80.0 ppt NaCl equivalent, 0.1 to 42 ppt practical salinity
	Resolution	0.1
	Relative Accuracy	± 0.1 ± 1 digit
TDS	Range	0 to 19999
	Resolution	1 mg/L
	Relative Accuracy	± 0.5 % ± 1 digit
DO	Concentration Range	0.00 to 90.0 mg/L
	Resolution	0.1, 0.01 mg/L
	Relative Accuracy	± 0.2 mg/L
	% Saturation Range	0.0 to 600 %
	Resolution	0.1, 1 %
	Relative Accuracy	± 2 %
	Barometric Pressure Correction	450 to 850 mm Hg, Automatic or Manual
Calibration Features	Water Saturated Air, Air Saturated Water, Manual (Winkler), and Zero Point	
	Probe Type	Polarographic
Temperature	Range	- 5 to 105 °C
	Resolution	0.1 up to 99.9 °C, 1.0 over 99.9 °C
	Relative Accuracy	± 0.1 °C

Portable Meter Only

Cat. No. Package

1218000 Includes meter, batteries and user guide

Portable Meter Kits

Cat. No. / Application	Sensor (s)	Accessories and Solutions
1218001 / Fresh Water	<ul style="list-style-type: none"> 9107WMMD Low maintenance epoxy pH/ATC Triode electrode with 3 meter cable 083010MD DO probe with 3 meter cable and calibration sleeve 013010MD DuraProbe conductivity cell, K = 0.475, includes 3 meter cable, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Meter impact jacket with electrode storage chamber Beaker Star Navigator 21 software with RS232 computer cable pH electrode storage solution (5 x 60 mL bottles) pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) DO probe maintenance kit - 080513 Protective probe guard 1413 µS/cm conductivity standard (10 x 15 mL pouches) Hard field case
1218501 / Fresh Water	<ul style="list-style-type: none"> 9107WMMD Low maintenance epoxy pH/ATC Triode electrode with 3 meter cable 083010MD DO probe with 3 meter cable and calibration sleeve 013010MD DuraProbe conductivity cell, K = 0.475, includes 3 meter cable, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Meter impact jacket with electrode storage chamber Beaker Star Navigator 21 software with RS232 computer cable pH electrode storage solution (5 x 60 mL bottles) pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) DO probe maintenance kit - 080513 Protective probe guard 1413 µS/cm conductivity standard (10 x 15 mL pouches) Soft field case
1218101 / Fresh Water	<ul style="list-style-type: none"> 9107WMMD Low maintenance epoxy pH/ATC Triode electrode with 3 meter cable 083010MD DO probe with 3 meter cable and calibration sleeve 013010MD DuraProbe conductivity cell, K = 0.475, includes 3 meter cable, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Meter impact jacket with electrode storage chamber Beaker Star Navigator 21 software with RS232 computer cable DO probe maintenance kit - 080513 Protective probe guard

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