

The Thermo Scientific Orion 4-Star Plus pH/conductivity meters combine two important quality-determining measurements into one device.

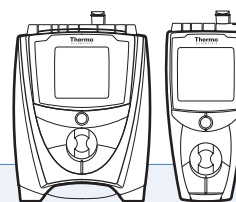
Thermo Scientific Orion 4-Star Plus pH/Conductivity Meters



Features and Benefits

- Simultaneous display of pH, conductivity and temperature measurements on the backlit LCD
- The Thermo Scientific Orion SMART STABILITY™ and SMART AVERAGING™ functions for automatically optimized accuracy, precision and response time
- Meet all U.S. Pharmacopeia (USP) requirements
- 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 with reading reference temperatures at 5 °C, 10 °C, 15 °C, 20 °C or 25 °C
- Compatible with 2-electrode and 4-electrode conductivity cells
- Storage of up to 10 individually password-protected methods for easy retrieval of operation procedures
- Datalog up to 750 points with time and date stamp
- Average slope and slope of segment printed with pH measurements
- RS232 port for easy data downloading and software updates
- Benchtop units can control an autosampler and the 096010 stirrer probe (each sold separately)
- Benchtop units are splashproof with an IP54-rated housing and include a universal power supply
- Portable units are waterproof with an IP67-rated housing and run for over 2,000 hours on four AA batteries
- 3 year meter warranty

Thermo Scientific Orion 4-Star Plus pH/Conductivity Meters



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
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

Meters Only

Cat. No.	Package
1117000	Includes benchtop meter, universal power and user guide
1217000	Includes portable meter, batteries and user guide

Benchtop Meter Kits

Cat. No. / Application	Sensor (s)	Accessories and Solutions
1117001 / Fresh Water	<ul style="list-style-type: none"> 9157BNMD Refillable epoxy pH/ATC Triode electrode 013605MD DuraProbe conductivity cell, K = 0.55, 10 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Swing arm electrode stand pH electrode storage solution (5 x 60 mL bottles) pH 4.01, 7.00, 10.01 buffers (pint bottles) 1413 µS/cm conductivity standard (5 x 60 mL bottles)
1117201 / Fresh Water	<ul style="list-style-type: none"> 9157BNMD Refillable epoxy pH/ATC Triode electrode 013005MD DuraProbe conductivity cell, K = 0.475, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Swing arm electrode stand

Portable Meter Kits

Cat. No. / Application	Sensor (s)	Accessories and Solutions
1217001 / Fresh Water	<ul style="list-style-type: none"> 9107BNMD Low maintenance epoxy pH/ATC Triode electrode 013005MD DuraProbe conductivity cell, K = 0.475, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> pH electrode storage solution (5 x 60 mL bottles) pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) 1413 µS/cm conductivity standard (10 x 15 mL pouches) Hard field case
1217002 / Fresh Water	<ul style="list-style-type: none"> 9107WMMD Low maintenance epoxy pH/ATC Triode electrode with 3 meter cable 013010MD DuraProbe conductivity cell, K = 0.475, includes 3 meter cable, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Beaker pH electrode storage solution (5 x 60 mL bottles) pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) 1413 µS/cm conductivity standard (10 x 15 mL pouches) Hard field case
1217501 / Fresh Water	<ul style="list-style-type: none"> 9107BNMD Low maintenance epoxy pH/ATC Triode electrode 013005MD DuraProbe conductivity cell, K = 0.475, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Beaker pH electrode storage solution (5 x 60 mL bottles) pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) 1413 µS/cm conductivity standard (10 x 15 mL pouches) Soft field case
1217502 / Fresh Water	<ul style="list-style-type: none"> 9107WMMD Low maintenance epoxy pH/ATC Triode electrode with 3 meter cable 013010MD DuraProbe conductivity cell, K = 0.475, includes 3 meter cable, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Beaker pH electrode storage solution (5 x 60 mL bottles) pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) 1413 µS/cm conductivity standard (10 x 15 mL pouches) Soft field case
1217101 / Fresh Water	<ul style="list-style-type: none"> 9107BNMD Low maintenance epoxy pH/ATC Triode electrode 013005MD DuraProbe conductivity cell, K = 0.475, 1 µS/cm to 200 mS/cm 	—
1217102 / Fresh Water	<ul style="list-style-type: none"> 9107WMMD Low maintenance epoxy pH/ATC Triode electrode with 3 meter cable 013010MD DuraProbe cond. cell, K = 0.475, includes 3 meter cable, 1 µS/cm to 200 mS/cm 	<ul style="list-style-type: none"> Beaker

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