The Thermo Scientific Orion 3-Star Plus conductivity meters work for a variety of applications and liquid purities.



## Thermo Scientific Orion 3-Star Plus

**Conductivity Meters** 



## **Features and Benefits**

- Simultaneous display of conductivity, resistivity, TDS or salinity 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
- Accept cell constants from 0.001 to 199.9 cm<sup>-1</sup>
- Compatible with 2-electrode and 4-electrode conductivity cells
- · Temperature calibration capability
- Conductivity / TDS / salinity / resistivity calibration of up to 5 points
- Reading reference temperatures at 5 °C, 10 °C, 15 °C, 20 °C or 25 °C

- Storage of up to 10 individually password-protected methods for easy retrieval of operation procedures
- Datalog up to 1000 points with time and date stamp
- 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 3-Star Plus Conductivity Meters

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	$0.5\% \pm 1$ digit or $0.01 \mu \text{S/cm}$ , 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		
1114000	Includes benchtop meter, universal power and user guide		
1214000	Includes portable meter, batterie	es and user guide	
Benchtop Meter Kits			
Cat. No. / Application	Sensor (s)	Accessories and Solutions	
<b>1114001 /</b> Fresh Water Wastewater	<ul> <li>013005MD DuraProbe conductivity cell, K = 0.475, 1 µS/cm to 200 mS/cm</li> </ul>	<ul> <li>1413 µS/cm conductivity standard (5 x 60 mL bottles)</li> <li>Swing arm electrode stand</li> </ul>	
<b>1114002 /</b> Ultra Pure Water	• 013016MD Conductivity cell, K = 0.1, includes flow cell, 0.01 µS/cm to 300 µS/cm	100 µS/cm conductivity standard (5 x 60 mL bottles)     Swing arm electrode stand	
<b>1114003 /</b> Ultra Pure Water	• 013016MD Conductivity cell, K = 0.1, includes flow cell, 0.01 $\mu$ S/cm to 300 $\mu$ S/cm	<ul> <li>100 µS/cm conductivity standard (5 x 60 mL bottles)</li> <li>Conductivity calibration resistor kit</li> <li>Star Navigator 21 software with RS232 computer cable</li> <li>Swing arm electrode stand</li> </ul>	
Portable Met	er Kits		
Cat. No. / Application	Sensor (s)	Accessories and Solutions	
<b>1214001 /</b> Fresh Water Wastewater	• 013005MD DuraProbe conductivity cell, K = 0.475, 1 µS/cm to 200 mS/cm	• 1413 µS/cm conductivity standard (10 x 15 mL pouches) • Hard field case	
<b>1214002 /</b> Ultra Pure Water	• 013016MD Conductivity cell, K = 0.1, includes flow cell, 0.01 µS/cm to 300 µS/cm	• 100 $\mu$ S/cm conductivity standard (5 x 60 mL bottles)	
<b>1214003 /</b> Fresh Water Wastewater	• 013610MD Conductivity cell, K = 0.55, includes 3 meter cable, 10 µS/cm to 200 mS/cm)	• 1413 µS/cm conductivity standard (10 x 15 mL pouches) • Hard field case	
<b>1214004 /</b> Ultra Pure Water	• 013016MD Conductivity cell, K = 0.1, includes flow cell, 0.01 μS/cm to 300 μS/cm	<ul> <li>100 μS/cm conductivity standard (5 x 60 mL bottles)</li> <li>Hard field case</li> </ul>	
<b>1214501 /</b> Fresh Water Wastewater	• 013005MD DuraProbe conductivity cell, K = 0.475, 1 μS/cm to 200 mS/cm	<ul> <li>1413 µS/cm conductivity standard (10 x 15 mL pouches)</li> <li>Soft field case</li> </ul>	
<b>1214503 /</b> Fresh Water Wastewater	013610MD DuraProbe conductivity cell, K = 0.55, includes 3 meter cable, 10 µS/cm to 200 mS/cm	1413 µS/cm conductivity standard (10 x 15 mL pouches)     Soft field case	
<b>1214504 /</b> Ultra Pure Water	• 013016MD Conductivity cell, K = 0.1, includes flow cell, 0.01 µS/cm to 300 µS/cm	<ul> <li>100 μS/cm conductivity standard (5 x 60 mL bottles)</li> <li>Soft field case</li> </ul>	
1214101 / Fresh Water Wastewater	<ul> <li>013005MD DuraProbe conductivity cell, K = 0.475, 1 µS/cm to 200 mS/cm</li> </ul>	_	





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