

The Thermo Scientific Orion 3-Star Plus pH meters are ideal for a variety of pH measurements – water, media, beverage, process water.

## Thermo Scientific Orion 3-Star Plus pH Meters



### Features and Benefits

- Simultaneous display of pH or mV, 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
- Temperature calibration capability
- pH calibration of up to 5 points with calibration alarm
- Automatic buffer recognition of USA, NIST and DIN buffers
- 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
- Average slope and slope of segment printed with pH measurements
- RS232 port for data downloads and communication
- 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

## Product Specifications and Ordering Information

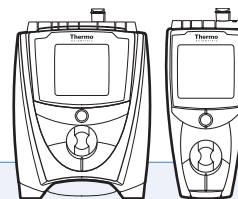
### Thermo Scientific Orion 3-Star Plus pH Meters

<b>pH</b>	Range	- 2.000 to 19.999
	Resolution	0.1, 0.01, 0.001
	Relative Accuracy	± 0.002
<b>mV</b>	Range	± 1999.9
	Resolution	0.1
	Relative Accuracy	± 0.2 or 0.05%, whichever is greater
<b>Temperature</b>	Range	- 5 to 105 °C
	Resolution	0.1 up to 99.9 °C, 1.0 over 99.9 °C
	Relative Accuracy	± 0.1 °C

### Ordering Information

Meters Only		
Cat. No.	Package	
1112000	Includes benchtop meter, universal power and user guide	
1212000	Includes portable meter, batteries and user guide	
Portable Meter Kits		
Cat. No. / Application	Sensor (s)	Accessories and Solutions
1212001 / Fresh Water	<ul style="list-style-type: none"> <li>9107BNMD Low maintenance epoxy pH/ATC Triode electrode</li> </ul>	<ul style="list-style-type: none"> <li>Beaker</li> <li>Electrode storage chamber</li> <li>pH electrode storage solution (5 x 60 mL bottles)</li> <li>pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches)</li> <li>Hard field case</li> </ul>
1212002 / TRIS Clog-Free Wastewater	<ul style="list-style-type: none"> <li>5107BNMD No Cal refillable pH/ATC electrode</li> </ul>	<ul style="list-style-type: none"> <li>Beaker</li> <li>pH electrode storage solution (5 x 60 mL bottles)</li> <li>pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches)</li> <li>Hard field case</li> </ul>
1212501 / Fresh Water	<ul style="list-style-type: none"> <li>9107BNMD Low maintenance epoxy pH/ATC Triode electrode</li> </ul>	<ul style="list-style-type: none"> <li>Beaker</li> <li>Electrode storage chamber</li> <li>pH electrode storage solution (5 x 60 mL bottles)</li> <li>pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches)</li> <li>Soft field case</li> </ul>
1212503 / ORP	<ul style="list-style-type: none"> <li>9179BNMD Low maintenance epoxy ORP/ATC Triode electrode</li> </ul>	<ul style="list-style-type: none"> <li>Meter impact jacket with electrode storage chamber</li> <li>ORP standard (5 x 60 mL bottles)</li> <li>Soft field case</li> </ul>
1212101 / Fresh Water	<ul style="list-style-type: none"> <li>9107BNMD Low maintenance epoxy pH/ATC Triode electrode</li> </ul>	—
1010115 / Fresh Water	<ul style="list-style-type: none"> <li>9107BNMD Low maintenance epoxy pH/ATC Triode electrode</li> </ul>	<ul style="list-style-type: none"> <li>Meter impact jacket with electrode storage chamber</li> <li>Electrode rinse solution (25 x 15 mL pouches)</li> <li>pH electrode storage solution (5 x 60 mL bottles)</li> <li>pH 4.01, 7.00 and 10.01 buffers (10 x 15 mL pouches)</li> <li>Soft field case</li> <li>Method Note - pH of Salt Water</li> </ul>
1010110 / Wastewater	<ul style="list-style-type: none"> <li>5107BNMD No Cal refillable pH/ATC electrode</li> </ul>	<ul style="list-style-type: none"> <li>Electrode storage chamber</li> <li>pH electrode storage solution (5 x 60 mL bottles)</li> <li>pH 4.01, 7.00 and 10.01 buffers (10 x 15 mL pouches)</li> <li>Method Note - pH of Wastewater</li> </ul>

### Ordering Information (cont'd)



#### Benchtop Meter Kits

Cat. No. / Application	Sensor (s)	Accessories and Solutions
1112001 / Fresh Water	<ul style="list-style-type: none"> <li>8157BNUMD refillable epoxy pH/ATC Triode electrode</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> <li>pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)</li> </ul>
1112003 / TRIS Fresh Water	<ul style="list-style-type: none"> <li>8102BNUWP ROSS Ultra refillable glass pH electrode</li> <li>927005MD Epoxy ATC probe</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> <li>pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)</li> </ul>
1112004 / Clog-Free Wastewater	<ul style="list-style-type: none"> <li>9172BNWP Sure-Flow refillable glass pH electrode</li> <li>927007MD Stainless steel ATC probe</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> <li>pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)</li> </ul>
1112006 / TRIS Ultra Pure Water	<ul style="list-style-type: none"> <li>8102BNUWP ROSS Ultra refillable glass pH electrode</li> <li>927005MD Epoxy ATC probe</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> <li>pH 4.10, 6.79, and 9.15 pure water buffers and pH electrode storage solution (pint bottles)</li> <li>pHISA adjuster solution (5 x 60 mL bottles)</li> </ul>
1112201 / Fresh Water	<ul style="list-style-type: none"> <li>9157BNMD Refillable epoxy pH/ATC Triode electrode</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> </ul>
1112202 / Clog-Free TRIS Wastewater	<ul style="list-style-type: none"> <li>8172BNWP ROSS Sure-Flow refillable glass pH electrode</li> <li>927006MD Glass ATC probe</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> </ul>
1112203 / TRIS Fresh Water	<ul style="list-style-type: none"> <li>9156APWP AquaPro low maintenance epoxy pH electrode</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> </ul>
1112204 / Fresh Water	<ul style="list-style-type: none"> <li>9107BNMD Low maintenance epoxy pH/ATC Triode electrode</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> </ul>
1112205 / Fresh Water	<ul style="list-style-type: none"> <li>9156BNWP Refillable epoxy pH electrode</li> <li>927007MD Stainless steel ATC probe</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> </ul>
1112207 / Fresh Water	<ul style="list-style-type: none"> <li>9106BNWP Low maintenance epoxy pH electrode</li> </ul>	<ul style="list-style-type: none"> <li>Swing arm electrode stand</li> </ul>
1112101 / TRIS Fresh Water	<ul style="list-style-type: none"> <li>8102BNUWP ROSS Ultra refillable glass pH electrode</li> <li>927007MD Stainless steel ATC probe</li> </ul>	—
1112102 / Clog-Free TRIS Wastewater	<ul style="list-style-type: none"> <li>8172BNWP ROSS Sure-Flow refillable glass pH electrode</li> <li>927006MD Glass ATC probe</li> </ul>	—
1112103 / TRIS Fresh Water	<ul style="list-style-type: none"> <li>8102BNUWP ROSS Ultra refillable glass pH electrode</li> </ul>	—
1112104 / Fresh Water	<ul style="list-style-type: none"> <li>9157BNMD Refillable epoxy pH/ATC Triode electrode</li> </ul>	—
1112107 / Fresh Water	<ul style="list-style-type: none"> <li>9106BNWP Low maintenance epoxy pH electrode</li> </ul>	—
1112108 / Clog-Free Wastewater	<ul style="list-style-type: none"> <li>9165BNWP Sure-Flow refillable epoxy pH electrode</li> </ul>	—

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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**  
Denmark House, Angel Drive  
Ely, Cambridgeshire  
England, CB7 4ET  
Tel: 44-1353-666111  
Fax: 44-1353-666001

**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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