

Thermo Scientific Orion 3-Star Plus pH Meters



**The ideal meter for
measuring pH in water,
process, research and
QA/QC testing**

Features and Benefits

- Simultaneous display of pH, mV or ORP, 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 software updates
- Benchtop units can control an autosampler and the 096019 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 replacement warranty

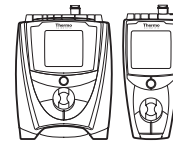


Accessories

Stirrer Probe

page 25

Mix your sample without a separate stirrer and don't worry about a stir bar. The Thermo Scientific Orion stirrer probe connects directly to the Star Plus benchtop meters for sample mixing the easy way.



CE | UL | CSA | TUV | EPA

Product Specifications		
pH	Range	- 2.000 to 19.999
	Resolution	0.1, 0.01, 0.001
	Relative Accuracy	± 0.002
mV • Rel mV • ORP	Range	± 1999.9
	Resolution	0.1
	Relative Accuracy	± 0.2 or 0.05%, whichever is greater
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 Kits

Cat. No.	Sensor (s)	Accessories and Solutions
1212001	• 9107BNMD low maintenance epoxy pH/ATC Triode™ electrode	<ul style="list-style-type: none"> • Beaker • Electrode storage chamber • pH electrode storage solution (5 x 60 mL bottles) • pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) • Hard field case
1212002	• 5107BNMD No Cal® refillable pH/ATC electrode	<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) • Hard field case
1212501	• 9107BNMD low maintenance epoxy pH/ATC Triode electrode	<ul style="list-style-type: none"> • Beaker • Electrode storage chamber • pH electrode storage solution (5 x 60 mL bottles) • pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches) • Soft field case
1212503	• 9179BNMD low maintenance epoxy ORP/ATC Triode electrode	<ul style="list-style-type: none"> • Meter impact jacket with electrode storage chamber • ORP standard (5 x 60 mL bottles) • Soft field case
1212101	• 9107BNMD low maintenance epoxy pH/ATC Triode electrode	—
1010115	• 9107BNMD low maintenance epoxy pH/ATC Triode electrode	<ul style="list-style-type: none"> • Meter impact jacket with electrode storage chamber • Electrode rinse solution (25 x 15 mL pouches) • pH electrode storage solution (5 x 60 mL bottles) • pH 4.01, 7.00 and 10.01 buffers (10 x 15 mL pouches) • Soft field case • Method Note - pH of Salt Water

Meters Only

Cat. No.	Package
1112000	Includes benchtop meter, universal power and user guide
1212000	Includes portable meter, batteries and user guide

Benchtop Meter Kits

Cat. No.	Sensor (s)	Accessories and Solutions
1112001	• 8157BNUMD ROSS Ultra® refillable pH/ATC Triode electrode	<ul style="list-style-type: none"> • Swing arm electrode stand • pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)
1112003	<ul style="list-style-type: none"> • 8102BNUWP ROSS Ultra refillable glass pH electrode • 927005MD epoxy ATC probe 	<ul style="list-style-type: none"> • Swing arm electrode stand • pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)
1112004	<ul style="list-style-type: none"> • 9172BNWP Sure-Flow® refillable glass pH electrode • 927007MD stainless steel ATC probe 	<ul style="list-style-type: none"> • Swing arm electrode stand • pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)
1112006	<ul style="list-style-type: none"> • 8102BNUWP ROSS Ultra refillable glass pH electrode • 927005MD epoxy ATC probe 	<ul style="list-style-type: none"> • Swing arm electrode stand • pH 4.10, 6.97, and 9.15 pure water buffers and pH electrode storage solution (pint bottles) • pHISA adjuster solution (5 x 60 mL bottles)
1112201	• 9157BNMD refillable epoxy pH/ATC Triode electrode	• Swing arm electrode stand
1112202	<ul style="list-style-type: none"> • 8172BNWP ROSS Sure-Flow refillable glass pH electrode • 927006MD glass ATC probe 	• Swing arm electrode stand
1112203	• 9156APWP AquaPro low maintenance epoxy pH electrode	• Swing arm electrode stand
1112204	• 9107BNMD low maintenance epoxy pH/ATC Triode electrode	• Swing arm electrode stand
1112205	<ul style="list-style-type: none"> • 9156BNWP refillable epoxy pH electrode • 927007MD stainless steel ATC probe 	• Swing arm electrode stand
1112102	<ul style="list-style-type: none"> • 8172BNWP ROSS Sure-Flow refillable glass pH electrode • 927006MD glass ATC probe 	—
1112002	—	• Swing arm electrode stand

pH

ISE

ORP

Cond

DO

Temp