# Thermo Scientific Orion ROSS Ultra Triode pH electrodes

Designed for stability, precision and response

Thermo Scientific Orion ROSS Ultra Triode pH electrodes with temperature compensation designed to increase the accuracy of your readings, while improving sensor stability, precision and response time at varying sample temperatures.



#### Markets:

- Pharmaceutical/Biopharmaceutical
- Food Manufacturing
- Academic/Government
- Environmental

## **Applications:**

- Quality Control
- Research
- General Purpose



# Measure pH and Temperature with One Electrode

Complete your pH measurements faster. Our Thermo Scientific™ Orion™ ROSS Ultra™ Triode™ pH/ATC electrodes are designed to offer flexibility, accuracy and precision for your pH measurements. With built-in temperature sensors, these electrodes offer a convenient solution for your routine sample measurements.

The ROSS Ultra Triode electrodes combine the stability, precision and speed of response of the ROSS Ultra line with integrated temperature measurement. ROSS electrodes contain no Silver or Silver Chloride and incorporate a double-junction design, which helps protect the sample from contamination and make the electrodes compatible with TRIS buffers.

Choose a versatile glass refillable design or a durable epoxy body available in refillable or low maintenance gel-filled options.

### **Benefits**

- Designed to shorten waiting time for pH readings to stabilize when measuring samples of varying temperatures. Stable to 0.01 pH within 30 seconds in 6.86 buffer between 25 °C and 75 °C
- Electrode design helps deliver accuracy and reproducibility in measurements, even in demanding samples
- Compatible in samples with TRIS, proteins and sulfides
- Your choice of durable epoxy or chemicalresistant glass body
- Enjoy long product lifetime. (2 year warranty on refillable models and 18 month warranty on low maintenance models)\*
- Compatible with Thermo Scientific<sup>™</sup>
   Orion<sup>™</sup> Versa Star<sup>™</sup>, Thermo Scientific<sup>™</sup>
   Orion Star<sup>™</sup> A, and Thermo Scientific<sup>™</sup>
   Orion<sup>™</sup> Dual Star<sup>™</sup> meters, as well as
   Mettler Toledo<sup>™</sup> pH meters



	Product Specifications							
	8107BNUMD	8107UWMMD	8107BNURCA	8157BNUMD	8157UWMMD	8157BNURCA	8302BNUMD	8302BNURCA
pH Range	0 to 14	0 to 14	0 to 14	0 to 14	0 to 14	0 to 14	0 to 14	0 to 14
pH Precision	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
pH Accuracy	0.03 pH for buffers using automatic temperature compensation							
Temperature Range	0-80°C			0-100 °C				
Internal Reference	ROSS	ROSS	ROSS	ROSS	ROSS	ROSS	ROSS	ROSS
Body	Rugged epoxy, filled with low maintenance gel			Rugged epoxy			Chemical-resistant glass	
Junction	Glass capillary			Glass fiber			Ceramic	
Isopotential Point	7	7	7	7	7	7	7	7
Fill Solution	None required			ROSS electrode 3 M KCl fill solution (Cat. No. 810007)				
Length	120 mm	120 mm	120 mm	120 mm	120 mm	120 mm	120 mm	120 mm
Diameter	12 mm	12 mm	12 mm	12 mm	12 mm	12 mm	12 mm	12 mm
Sample Compatibility	TRIS, sulfides, or proteins							
Cable Length	1 m	3 m	1 m	1 m	3 m	1 m	1 m	1 m
Connector Type	BNC Waterproof, 8-pin MiniDIN (compatible with Orion Star meters)	BNC Waterproof, 8-pin MiniDIN (compatible with Orion Star meters)	BNC Waterproof, RCA	BNC Waterproof, 8-pin MiniDIN (compatible with Orion Star meters)	BNC Waterproof, 8-pin MiniDIN (compatible with Orion Star meters)	BNC Waterproof, RCA	BNC Waterproof, 8-pin MiniDIN (compatible with Orion Star meters)	BNC Waterproof, RCA
Warranty*	18 months			2 years				
Meter Compatibility		tific Orion Versa I Dual Star meters	Mettler Toledo Five and Seven series pH meters	Thermo Scientific Orion Versa Star, Star, Star A and Dual Star meters		Mettler Toledo Five and Seven series pH meters	Thermo Scientific Orion Versa Star, Star, Star A and Dual Star meters	Mettler Toledo Five and Seven series pH meters

<sup>\*</sup>Subject to terms of manufacturer's standard limited warranty. Please contact your sales representative for more details.

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