

# Thermo Scientific Orion ROSS Ultra Triode pH electrodes

Superior stability, precision and response

Thermo Scientific Orion ROSS Ultra Triode pH electrodes with temperature compensation 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 electrodes offer more flexibility, accuracy and precision for your pH measurement needs. With built-in temperature sensors, these electrodes offer a convenient solution for your routine sample measurements.

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

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

#### Benefits

- No more waiting 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
- Have confidence in the accuracy and reproducibility of your results, even with demanding samples
- Be certain that your sample is safe from contamination
- Compatible in samples with TRIS, proteins and sulfides
- Your choice of durable epoxy or chemical-resistant glass body
- Maximize your budget with a longer product lifetime. We stand behind our ROSS Ultra Triode pH electrodes with a 2 yr. warranty on refillable models and 18 mo. warranty on low maintenance models
- Compatible with Thermo Scientific™ Orion™ VERSA STAR™, Thermo Scientific™ Orion Star™ A, and Thermo Scientific™ Orion™ DUAL STAR™ meters, as well as Mettler Toledo™ pH meters

**Thermo**  
SCIENTIFIC

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

[thermoscientific.com/water](http://thermoscientific.com/water)

© 2014 Thermo Fisher Scientific Inc. All rights reserved. METTLER TOLEDO is a trademark of Mettler-Toledo, LLC All other trademarks are the property of Thermo Fisher Scientific and its subsidiaries.

#### Water Analysis Instruments

**North America**  
Toll Free: 1-800-225-1480  
Tel: 1-978-232-6000  
info.water@thermo.com

**Netherlands**  
Tel: (31) 033-2463887  
info.water.uk@thermo.com

**India**  
Tel: (91) 22-4157-8800  
wai.asia@thermofisher.com

**Japan**  
Tel: (81) 045-453-9175  
wai.asia@thermofisher.com

**China**  
Tel: (86) 21-68654588  
wai.asia@thermofisher.com

**Singapore**  
Tel: (65) 6778-6876  
wai.asia@thermofisher.com

**Australia**  
Tel: (613) 9757-4300  
in Australia (1300) 735-295  
InfoWaterAU@thermofisher.com

**Thermo**  
SCIENTIFIC

A Thermo Fisher Scientific Brand