

# Thermo Scientific Orion Star A321

Premium pH portable meter

The Thermo Scientific™ Orion™ Star A321 pH Portable Meter is the top choice for testing samples anywhere. It is rugged and dependable, making it ideal for every sample, every day, everywhere.



The Thermo Scientific Orion Star A321 pH Portable Meter is the top choice for advanced measurements on location. Get the information you need quickly and easily from the large, backlit graphic LCD display. Informative display shows pH/mV/RmV and temperature along with electrode status, time, date, sample ID, user ID and calibration points.

## Features and Benefits

- Easy meter operation assured with on-screen text prompts, menu-specific function keys and a multi-language interface for English, Spanish, French, Italian, German and Chinese
- Don't miss a reading—AUTO-READ™ locks in the stable reading on your screen, ready indicator alerts when readings are stable and timed reading gathers data in specific time intervals
- Up to 5 point pH calibration with automatic recognition for USA/NIST and DIN buffers or manual option for custom buffer values and calibration editing to fix individual points without a full recalibration

- Non-volatile memory holds up to 5000 data points with time and date stamp
- Easily transfer data and keep meter software up-to-date with the USB and RS232 ports and complimentary Orion Star Com computer software
- Four AA batteries (included) provide over 800 hours of operation or purchase the universal power adapter (sold separately)
- Perfectly portable, waterproof and protected to take anywhere with a IP67-rated housing
- 3 year meter replacement warranty

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## Thermo Scientific Orion Star A321 pH Portable Meter

Specifications	
<b>pH</b>	<b>Range:</b> -2.000 to 20.000 <b>Resolution:</b> 0.1, 0.01, 0.001 <b>Relative Accuracy:</b> ±0.002 <b>Calibration Points:</b> Up to 5 <b>Calibration Editing:</b> Yes
<b>mV/RmV</b>	<b>Range:</b> ±2000.0 mV <b>Resolution:</b> 0.1 mV <b>Relative Accuracy:</b> ±0.2 mV or ±0.05 % of reading whichever is greater <b>E<sub>H</sub> ORP Mode:</b> Yes
<b>Temperature</b>	<b>Range:</b> -5 to 105 °C, 23 to 221 °F <b>Resolution:</b> 0.1 °C, 0.1 °F <b>Relative Accuracy:</b> ±0.1 °C, ±0.1 °F <b>Offset Calibration:</b> 1 point
<b>Datalogging</b>	<b>Memory:</b> 5000 with time and date stamp <b>Log Function:</b> Manual, ready (includes AUTO-READ), timed
<b>Inputs</b>	<b>pH Electrode:</b> BNC, reference pin <b>ATC Probe:</b> 8-pin mini-DIN
<b>Output</b>	RS232, USB
<b>Power</b>	<b>AC Adapter:</b> Optional—universal, 100-240 VAC <b>Battery Power:</b> Included—4 AAs <b>Battery Life:</b> 800 hrs



**Certified System**  
Thermo Fisher Scientific  
Water Analysis Instruments  
Chelmsford, MA USA  
Quality Management System  
Registered to ISO 9001

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

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### Meter Ordering Information

Part No.	Description
<b>STARA3210</b>	<b>Orion Star A321 pH Portable Meter</b> - Four AA batteries (installed) - Printed quick start guide and literature CD - USB computer cable
<b>STARA3215</b>	<b>Orion Star A321 pH Portable Meter Kit</b> - 8107UWMMMD Orion ROSS Ultra Triode gel-filled epoxy-body pH/ATC electrode, 3 m cable - 910410-WA Orion pH 4.01 buffer pouches - 910710 Orion pH 7.00 buffer pouches - 911010 Orion pH 10.01 buffer pouches - 810001 Orion ROSS electrode storage solution, 475 mL - 911110 Orion rinse solution pouches - Protective armor with electrode holder and storage sleeve - Hard-sided field case - Four AA batteries (installed) - Printed quick start guide and literature CD - USB computer cable

### Accessories Ordering Information

Part No.	Description
<b>STARA-CS</b>	Orion Star A series portable meter hard-sided field case
<b>1210005</b>	Orion Star A series portable meter soft-sided field case
<b>STARA-AR</b>	Orion Star A series portable meter armor with pH electrode holder, conductivity and DO probe holder, stand and adjustable hand-strap
<b>STARA-ESP</b>	Orion pH electrode holder for portable Star A series meter armor
<b>810017</b>	Orion pH electrode storage sleeve for pH electrode holder
<b>8107UWMMMD</b>	Orion ROSS Ultra Triode gel-filled epoxy-body pH/ATC electrode, 3 m cable
<b>8107BNUMD</b>	Orion ROSS Ultra Triode gel-filled epoxy-body pH/ATC electrode, 1 m cable
<b>1010003</b>	Universal power adapter, 100-240 V, 50/60 Hz
<b>910410-WA</b>	Orion pH 4.01 buffer pouches, 10 pack
<b>910710</b>	Orion pH 7.00 buffer pouches, 10 pack
<b>911010</b>	Orion pH 10.01 buffer pouches, 10 pack
<b>911110</b>	Orion pH rinse solution pouches, 10 pack
<b>9179BNMD</b>	Orion Triode gel-filled epoxy-body ORP/ATC electrode
<b>967961</b>	Orion ORP standard solution, 5 x 60 mL

For more information, contact your local Thermo Scientific products dealer or call our customer and technical service experts at 1-800-225-1480 (for the US and Canada) or visit [www.thermoscientific.com/water](http://www.thermoscientific.com/water).



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