

## Thermo Scientific Orion Star A221 pH Portable Meter

The Thermo Scientific Orion Star A221 pH Portable Meter makes necessary testing easier. Its durability and dependability make it a great choice for samples every day, anywhere.



Get the readings that you need where you need them with the Thermo Scientific Orion Star A221 pH Portable Meter. The large, backlit graphic LCD display shows pH/mV/RmV and temperature along with electrode status, time, date and calibration points.

### Features and Benefits

- Anyone can use this meter with its plain language screen prompts, soft keys that update for easy selection and a multilanguage interface that supports English, Spanish, French, Italian, German and Chinese
- Don't miss a reading – AUTO-READ™ locks in the stable reading on your screen and ready indicator alerts when readings are stable
- Up to 5 point pH calibration with automatic recognition for USA/NIST and DIN buffers
- Non-volatile memory holds up to 1000 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 data analysis software
- Four AA batteries (included) provide over 800 hours of operation or purchase the universal power adapter (sold separately) to use AC power
- Perfectly portable, waterproof and protected to take anywhere with a IP67-rated housing
- 3 year meter replacement warranty

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### 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>mV/RmV</b>	<b>Range</b>	±2000.0 mV
	<b>Resolution</b>	0.1
	<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
	<b>Relative Accuracy</b>	±0.1
	<b>Offset Calibration</b>	1 point
<b>Datalogging</b>	<b>Number of Points</b>	1000 with time and date stamp
	<b>Log Function</b>	Manual, Automatic with AUTO-READ™
	<b>Log Edit</b>	Delete last reading or all
<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

### Ordering Information

Cat. No.	Description
<b>STARA2210</b>	<b>Orion STAR A221 pH Portable Meter</b> - Four AA batteries (installed)
<b>STARA2215</b>	<b>Orion STAR A221 pH Portable Meter Kit</b> - 8107UWMMD Orion ROSS Triode 3-in-1 pH/ATC probe - 910410 Orion pH 4.01 buffer, 10 pouches - 910710 Orion pH 7.00 buffer, 10 pouches - 911010 Orion pH 10.01 buffer, 10 pouches - 810001 Orion ROSS electrode storage solution, 475 mL - 911110 rinse solution, 10 pouches - Protective armor with electrode holder - Hard carrying case - Four AA batteries (installed)
<b>Accessories</b>	
<b>STARA-CS</b>	Hard carrying case for Orion Star A-series portable meters
<b>STARA-AR</b>	Armor for Orion Star A-series portable meters, includes electrode holders for pH, conductivity and DO probes
<b>STARA-ESPH</b>	pH electrode holder for Orion Star A-series armor
<b>STARA-ESCD</b>	Conductivity and DO probe holder for Orion Star A-series armor
<b>8107UWMMD</b>	Orion ROSS Triode 3-in-1 pH/ATC probe, gel-filled, 3m cable
<b>1010003</b>	Optional universal power adapter, 100-240 V, 50/60 Hz
<b>910410</b>	Orion pH 4.01 buffer pouches, 10/pk
<b>910710</b>	Orion pH 7.00 buffer pouches, 10/pk
<b>911010</b>	Orion pH 10.01 buffer pouches, 10/pk
<b>911110</b>	Orion pH rinse solution pouches, 10/pk

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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