Thermo Scientific Orion Star A221

Advanced 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/ ORP and temperature along with electrode status, time, date 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 and ready indicator alerts when continuous readings are stable
- Up to 5 point pH calibration with automatic recognition for USA/NIST and DIN buffers or manual option for custom buffer values

- 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 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



Thermo Scientific Orion Star A221 pH Portable Meter

	Specifications
pH	Range: -2.000 to 20.000
	Resolution: 0.1, 0.01, 0.001
	Relative Accuracy: ±0.002
	Calibration Points: Up to 5
mV/RmV	Range: ±2000.0 mV
	Resolution: 0.1 mV
	Relative Accuracy: ±0.2 mV or ±0.05 % of
	reading whichever is greater
	E _H ORP Mode: Yes
Temperature	Range: -5 to 105 °C, 23 to 221 °F
	Resolution: 0.1 °C, 0.1 °F
	Relative Accuracy: ±0.1 °C, ±0.1 °F
	Offset Calibration: 1 point
Datalogging	Memory: 1000 with time and date stamp
	Log Function: Manual, Automatic
	with AUTO-READ
Inputs	pH Electrode: BNC, reference pin
	ATC Probe: 8-pin mini-DIN
Output	RS232, USB
Power	AC Adapter: Optional—universal,
	100-240 VAC
	Battery Power: Included—4 AAs
	Battery Life: 800 hrs

	Meter Ordering Information		
Part No.	Description		
STARA2210	Orion Star A221 pH Portable Meter - Four AA batteries (installed), literature, PC cable and test certificate		
STARA2215	Orion Star A221 pH Portable Meter Standard Kit - 8107UWMMD Orion ROSS Ultra Triode gel epoxy pH/ATC electrode, 3 m cable - Orion pH 4, 7, 10 buffer and rinse pouches, 10 each - Orion ROSS pH electrode storage solution, 475 mL - Protective meter armor with electrode holder - Hard-sided field case - Four AA batteries (installed), literature, PC cable and test certificate		

 9179BNMD Orion gel epoxy ORP/ATC electrode 967961 Orion ORP standard, 5 x 60 mL 911110 Orion rinse solution pouch 10 pack 910060 Orion storage solution, 5 x 60 mL Protective meter armor with electrode holder Hard-sided field case Four AA batteries (installed), literature, PC cable and test certificate 	STARA2216	Orion Star A221 pH Portable Meter General Purpose Kit	
- Orion pH 4, 7, 10 buffer and rinse pouches, 10 each - Orion pH electrode storage solution, 475 mL - Protective meter armor with electrode holder - Hard-sided field case - Four AA batteries (installed), literature, PC cable and test certificate 2217 Orion Star A221 pH Portable Meter ORP Kit - 9179BNMD Orion gel epoxy ORP/ATC electrode - 967961 Orion ORP standard, 5 x 60 mL - 911110 Orion rinse solution pouch 10 pack - 910060 Orion storage solution, 5 x 60 mL - Protective meter armor with electrode holder - Hard-sided field case - Four AA batteries (installed), literature, PC cable and test certificate Orion Star A221 pH Portable Meter Food Sample Kit - 8163BNWP Orion ROSS Spear-Tip pH electrode - 927007MD Orion stainless steel ATC probe - Orion pH 4, 7, 10 buffer and rinse pouches, 10 each - ROSS pH electrode storage solution, 475 mL - Protective meter armor with electrode holder - Hard-sided field case - Four AA batteries (installed), literature, PC cable and test certificate		- 9107BNMD Orion Triode gel epoxy	
10 each Orion pH electrode storage solution, 475 mL Protective meter armor with electrode holder Hard-sided field case Four AA batteries (installed), literature, PC cable and test certificate 2217 Orion Star A221 pH Portable Meter ORP Kit 9179BNMD Orion gel epoxy ORP/ATC electrode 967961 Orion ORP standard, 5 x 60 mL 911110 Orion rinse solution pouch 10 pack 910060 Orion storage solution, 5 x 60 mL Protective meter armor with electrode holder Hard-sided field case Four AA batteries (installed), literature, PC cable and test certificate 2218 Orion Star A221 pH Portable Meter Food Sample Kit 8163BNWP Orion ROSS Spear-Tip pH electrode 927007MD Orion stainless steel ATC probe Orion pH 4, 7, 10 buffer and rinse pouches, 10 each ROSS pH electrode storage solution, 475 mL Protective meter armor with electrode holder Hard-sided field case Four AA batteries (installed), literature, PC cable and test certificate		pH/ATC electrode	
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Accessories Ordering Information				
Part No.	Description			
STARA-CS	Orion Star A series portable meter hard-sided field case			
1210005	Orion Star A series portable meter soft-sided field case			
STARA-AR	Orion Star A series portable meter armor with pH electrode holder, conductivity and DO probe holder, stand and adjustable hand-strap			
STARA-ESPH	Orion pH electrode holder for portable Star A series meter armor			
810017	Orion pH electrode storage sleeve for pH electrode holder			
1010003	Universal power adapter, 100-240 V, 50/60 Hz			

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.



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North America

Toll Free: 1-800-225-1480 Tel: 1-978-232-6000 info.water@thermofisher.com

Germany

Tel: (49) 6184-90-6000 info.water.uk@thermofisher.com

China

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

India

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

Singapore

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

Japan

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

Australia

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



STARA-AR

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