

# Thermo Scientific Orion Star A322

Premium conductivity portable meter

The Thermo Scientific™ Orion™ Star A322 Conductivity 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 A322 Conductivity 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 conductivity/TDS/salinity resistivity and temperature along with time, date, sample ID, user ID and calibration information.

## 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
- Automatic or manual conductivity calibration and auto-ranging measurements for high accuracy across all conductivity ranges
- Selectable reference temperatures of 5, 10, 15, 20 or 25 °C with linear, non-linear or EP curve options for temperature compensated conductivity readings
- 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 A322  
Conductivity Portable Meter**

Specifications	
<b>Conductivity</b>	<b>Range:</b> 0.001 $\mu$ S to 3000 mS <b>Resolution:</b> 0.001 $\mu$ S minimum, auto ranging, up to 4 significant digits <b>Relative Accuracy:</b> 0.5 % of reading $\pm$ 1 digit > 3 $\mu$ S, 0.5 % of reading $\pm$ 0.01 $\mu$ S $\leq$ 3 $\mu$ S <b>Reference Temperature:</b> 5, 10, 15, 20, 25 $^{\circ}$ C <b>Temperature Compensation:</b> Linear (0 to 10.0 %/ $^{\circ}$ C), nonlinear nLFn & nLFu, EP (USP), off <b>Compatible Cell Constants:</b> 0.001 to 199.9 <b>Calibration Points:</b> Up to 5 points <b>Calibration Editing:</b> Yes
<b>Resistivity</b>	<b>Range:</b> 2 ohm to 100 meg-ohm <b>Resolution:</b> 1 ohm or 0.1 meg-ohm, auto ranging <b>Relative Accuracy:</b> 0.5 % reading $\pm$ 1 digit
<b>Salinity</b>	<b>Type:</b> Practical salinity or natural sea water <b>Range:</b> 0.06 to 80.00 psu, 0.05 to 42.00 ppt <b>Resolution:</b> 0.01 psu, 0.01 ppt <b>Relative Accuracy:</b> 0.5 % reading $\pm$ 1 digit
<b>TDS</b>	<b>Range:</b> 0.001 to 200.0 ppt <b>Resolution:</b> 0.001 ppt minimum, auto ranging, up to 4 significant digits <b>Relative Accuracy:</b> $\pm$ 0.5 % reading $\pm$ 1 digit <b>TDS Factor Range:</b> Linear 0.02 to 9.99
<b>Temperature</b>	<b>Range:</b> -5 to 105 $^{\circ}$ C, 23 to 221 $^{\circ}$ F <b>Resolution:</b> 0.1 $^{\circ}$ C, 0.1 $^{\circ}$ F <b>Relative Accuracy:</b> $\pm$ 0.1 $^{\circ}$ C, $\pm$ 0.1 $^{\circ}$ 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>Conductivity Probe with Built-in Temperature:</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

Meter Ordering Information	
Part No.	Description
<b>STARA3220</b>	<b>Orion Star A322 Conductivity Portable Meter</b> - Four AA batteries (installed), literature, PC cable and test certificate
<b>STARA3225</b>	<b>Orion Star A322 Conductivity Portable Meter Standard Kit</b> - 013010MD Orion DuraProbe 4-cell conductivity probe with 3 m cable, K=0.475 - 01100710 Orion 1413 $\mu$ S conductivity standard pouches - 911110 Orion rinse solution pouches - Protective meter armor with electrode holder - Hard-sided field case - Four AA batteries (installed), literature, PC cable and test certificate
<b>STARA3226</b>	<b>Orion Star A322 Conductivity Portable Meter Pure Water Kit</b> - 013016MD Orion 2-cell pure water conductivity probe, K=0.1, with flow cell - 011008 Orion 100 $\mu$ S conductivity standard - 911110 Orion rinse solution pouches - Protective meter armor with electrode holder - Hard-sided field case - Four AA batteries (installed), literature, PC cable and test certificate

Accessories Ordering Information	
Part No.	Description
<b>STARA-CS</b>	Orion Star A portable hard-sided field case
<b>1210005</b>	Orion Star A portable 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-ESCD</b>	Orion conductivity and DO probe holder for portable Star A series meter armor
<b>013010MD</b>	Orion DuraProbe conductivity probe with 3 m cable, 4-cell, K=0.475
<b>1010003</b>	Universal power adapter, 100-240 V, 50/60 Hz
<b>1010001</b>	Orion conductivity calibration resistor kit

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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