

## Thermo Scientific Orion Star A324 pH/ISE Portable Meter

The Thermo Scientific Orion Star A324 pH/ISE 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 A324 pH/ISE Portable Meters 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. Advanced features such as stability and averaging options provide additional options allowing for laboratory accuracy everywhere you need it.

### 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, 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
- Whether you use ISE infrequently or have multiple samples every day – up to 5 point ISE calibration with advanced features such as timed end point, linear point-to-point, non-linear selectable auto-blank and low-concentration range stability
- Fix errors without a complete recalibration with the calibration editing function
- 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 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>Calibration Editing</b>	Yes
<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>ISE</b>	<b>Range</b>	0 to 19999
	<b>Resolution</b>	Up to 3 significant digits
	<b>Relative Accuracy</b>	±0.2 mV or ±0.05 % of reading whichever is greater
	<b>Units</b>	ppm, M, mg/L, %, ppb, none
	<b>Calibration Points</b>	Up to 5
	<b>Calibration Editing</b>	Yes
	<b>Calibration Features</b>	Timed end point, linear point to point, non-linear selectable auto-blank, low concentration range stability
<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>	2000 with time and date stamp
	<b>Log Function</b>	Manual, ready (includes AUTO-READ™), timed
	<b>Log Edit</b>	Delete individual points, group of points 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>STARA3240</b>	<b>Orion STAR A324 pH/ISE Portable Meter</b> - Four AA batteries (installed)
<b>STARA3245</b>	<b>Orion STAR A324 pH/ISE Portable Meter Kit</b> - 8107UWMMMD Orion ROSS Triode 3-in-1 pH/ATC Probe - Orion pH 4, 7 and 10 buffers, 10 pouches of each value - 810001 Orion ROSS electrode storage solution - 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>1210005</b>	Soft carrying case for Orion Star, Star Plus and 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>8107UWMMMD</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
<b>9512HPBNWP</b>	Orion high-performance ammonia ISE
<b>9512BNWP</b>	Orion standard ammonia ISE
<b>951007</b>	Ammonia standard, 1000 ppm, 475 mL
<b>951210</b>	Low-level ammonia ISA
<b>951211</b>	Ammonia ISA, 475 mL
<b>951209</b>	Fill solution for Orion high-performance ammonia ISE, 60 mL
<b>951202</b>	Fill Solution for standard ammonia ISE, 60 mL
<b>951213</b>	Ammonia ISE storage solution
<b>9609BNWP</b>	Orion fluoride combination ISE
<b>040906</b>	Fluoride standard, 1 ppm with TISAB II, 475 mL
<b>040907</b>	Fluoride standard, 2 ppm with TISAB II, 475 mL
<b>040908</b>	Fluoride standard, 10 ppm with TISAB II, 475 mL
<b>940909</b>	TISAB II, 1 gallon
<b>8611BNWP</b>	Orion ROSS sodium combination ISE

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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