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.

# Thermo Scientific Orion Star A324 pH/ISE Portable Meter





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



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

## **Specifications**









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рН	Range	-2.000 to 20.000
	Resolution	0.1, 0.01, 0.001
	Relative Accuracy	±0.002
	Calibration Points	Up to 5
	Calibration Editing	Yes
mV/RmV	Range	±2000.0 mV
	Resolution	0.1
	Relative Accuracy	±0.2 mV or ±0.05 % of reading whichever is greater
	E <sub>H</sub> ORP Mode	Yes
ISE	Range	0 to 19999
	Resolution	Up to 3 significant digits
	Relative Accuracy	±0.2 mV or ±0.05 % of reading whichever is greater
	Units	ppm, M, mg/L, %, ppb, none
	<b>Calibration Points</b>	Up to 5
	<b>Calibration Editing</b>	Yes
	Calibration Features	Timed end point, linear point to point, non-linear selectabl auto-blank, low concentratio range stability
Temperature	Range	-5 to 105 °C, 23 to 221 °F
	Resolution	0.1
	Relative Accuracy	±0.1
	Offset Calibration	1 point
Datalogging	Memory	5000 with time and date stamp
	Log Function	Manual, ready (includes AUTO-READ™), timed
	Log Edit	Delete individual points, group of points or all
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

#### **Ordering Information**

Cat. No.	Description	
STARA3240	Orion STAR A324 pH/ISE Portable Meter	
51AKA3240	- Four AA batteries (installed)	
STARA3245	Orion STAR A324 pH/ISE Portable Meter Kit - 8107UWMMD 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)	
Accessories		
STARA-CS	Hard carrying case for Orion Star A-series portable meters	
1210005	Soft carrying case for Orion Star, Star Plus and Star A-series portable meters	
STARA-AR	Armor for Orion Star A-series portable meters, includes electrode holders for pH, conductivity and DO probes	
STARA-ESPH	pH electrode holder for Orion Star A-series armor	
STARA-ESCD	Conductivity and DO probe holder for Orion Star A-series armor	
8107UWMMD	Orion ROSS Triode 3-in-1 pH/ATC probe, gel-filled, 3m cable	
1010003	Optional universal power adapter, 100-240 V, 50/60 Hz	
910410	Orion pH 4.01 buffer pouches, 10/pk	
910710	Orion pH 7.00 buffer pouches, 10/pk	
911010	Orion pH 10.01 buffer pouches, 10/pk	
911110	Orion pH rinse solution pouches, 10/pk	
9512HPBNWP	Orion high-performance ammonia ISE	
9512BNWP	Orion standard ammonia ISE	
951007	Ammonia standard, 1000 ppm, 475 mL	
951210	Low-level ammonia ISA	
951211	Ammonia ISA, 475 mL	
951209	Fill solution for Orion high-performance ammonia ISE, 60 mL	
951202	Fill Solution for standard ammonia ISE , 60 mL	
951213	Ammonia ISE storage solution	
9609BNWP	Orion fluoride combination ISE	
040906	Fluoride standard, 1 ppm with TISAB II, 475 mL	
040907	Fluoride standard, 2 ppm with TISAB II, 475 mL	
040908	Fluoride standard, 10 ppm with TISAB II, 475 mL	
940909	TISAB II, 1 gallon	
8611BNWP	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.

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**North America** 166 Cummings Center Beverly, MA 01915 USA Toll Free: 1-800-225-1480 Tel: 1-978-232-6000 info.water@thermo.com

Netherlands

Tel: (31) 033-2463887 info.water.uk@thermo.com

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

wai.asia@thermofisher.com

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

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

Australia

Tel: (613) 9757-4300 infowaterau@thermofisher.com



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