



# Thermo Scientific Orion VERSA STAR 40

pH/ISE Benchtop Meters

Measuring pH/ISE has never looked so good or been so easy. The large color display is easy on to read and easy on the eyes. Prompts make accuracy and repeatability easy for even the most complicated testing. If you need to add more channels for more or obtain more parameters from the same, simply remove the protective individual channel cover and add the new module.

#### **Features and Benefits**

- Versatility is the name of the game
  - Change out modules to create the meter you need at any time
  - Customize the display to show only the information you need
- Up to 6 point pH calibration with automatic recognition for USA/NIST and DIN buffers and electrode identification
- This meter features advanced ISE capabilities to work with all ISE testing applications, even the most complex
  - Up to 6 point ISE calibration with timed end point and point-to-point or linear regression slope
  - Non-linear selectable auto-blank and low-concentration range stability
  - Incremental techniques for known or analyte addition and subtraction
  - Adjustable isopoint for temperature-compensated ISE results
- Fix errors without a complete recalibration with the calibration editing function
- Anyone can use this meter with its plain language screen prompts, function 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 or just once with single-shot mode
- Non-volatile memory holds up to 2000 data points with time and date stamp
- Stores up to 10 methods per channel allow for customized procedures to differentiate between tests and/or users
- Two USB and a RS232 port makes for easy data transfer and updating meter software
- Includes data analysis software for easy transferring of stored results or real-time viewing
- Increase your productivity two Orion Star stirrer probe ports allow for simultaneous stirring and control for two separate samples at the same time
- Included electrode arm and newly-designed probe holder make it easier to maintain and place probes into samples
- Works with almost every AC power source through the included universal power adapter

- IP54-rated housing handles splashes and cleans up easily
- 3 year meter replacement warranty

### **Product Specifications - Orion VERSA STAR Meter**

		CE   TUV   EPA
Maximum Number of Modules		4
Methods		Up to 10
Datalogging	Number of Datalogs	2000 with time and date stamp
	Log Function	Manual, AUTO-READ™, timed interval, single timed reading
Communication Ports		One RS232, two USB ports (one client, one host)
Orion Star Stirrer Probe Ports		2
Power		Universal, AC power adapter, 90-260 VAC, 50-60 Hz

### Product Specifications - pH/ISE Module (VSTAR-ISE)

		CE   TUV   EP
	Range	-2.000 to 20.000
	Resolution	0.1, 0.01, 0.001
рН	Relative Accuracy	±0.002
	Calibration Points	Up to 6
	Calibration Editing	Yes
	Adjustable ISO Point	Yes
	Range	±2000.0 mV
mV/Rel mV/	Resolution	0.1
ORP	Relative Accuracy	±0.2 mV or ±0.05 % of reading whichever is greater
	E <sub>H</sub> ORP Mode	Yes
	Range	0 to 19999
ISE	Resolution	Up to 4 significant digits
	Relative Accuracy	±0.2 mV or ±0.05 % of reading whichever is greater
	Units	ppm, M, mg/L, %, ppb, none
	Calibration Points	Up to 6
	Calibration Editing	Yes
IOL	Adjustable ISO Point	Yes
	Calibration Features	Timed end point, linear point to point, non-linear selectable auto-blank, low concentration range stability
	Incremental Techniques	Single known addition & subtraction, double known addition & subtraction, single analate addition & subtraction
	Advanced Features	Displays electrode type, temperature compensation
	Range	-5 to 105 °C, 23 to 221 °F
Temperature	Resolution	0.1
	Relative Accuracy	±0.1
	Offset Calibration	1 point
Inputs	pH/ISE	BNC, reference pin
	ATC	8-pin mini-DIN



That's not all. We have more to show you.

## **Meter Ordering Information**

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Cat. No.	Description
VSTAR40A	Orion VERSA STAR pH/ISE Benchtop Meter Set - Orion VERSA STAR meter - Orion VERSA STAR pH/ISE/temperature module - Electrode arm with redesigned holder - Universal power adapter
VSTAR40A2	Orion VERSA STAR pH/ISE Benchtop Meter Kit  Orion VERSA STAR meter  Orion VERSA STAR peter  Orion VERSA STAR pH/ISE/temperature module  8102BNUWP Orion ROSS Ultra pH electrode  096019 Orion Star stirrer probe  927007MD ATC probe, stainless steel  ROSS solution kit (475 mL each of pH 4, 7 and  10 buffers; storage solution; cleaning solution; and pH electrode storage bottle)  Electrode arm with redesigned holder  Universal power adapter
VSTAR40B	Orion VERSA STAR Benchtop Meter with Two pH/ISE Modules Set - Orion VERSA STAR meter - Two Orion VERSA STAR pH/ISE/temperature modules - Electrode arm with redesigned holder - Universal power adapter
VSTAR40B2	Orion VERSA STAR Benchtop Meter with Two pH/ISE Modules Kit - Orion VERSA STAR meter - Two Orion VERSA STAR pH/ISE/temperature modules - 8102BNUWP Orion ROSS Ultra pH electrode - 096019 Orion Star stirrer probe - 927007MD ATC probe, stainless steel - ROSS solution kit (475 mL each of pH 4, 7 and 10 buffers; storage solution; cleaning solution; and pH electrode storage bottle) - Two electrode arms with redesigned holders - Universal power adapter



Accessorie	s		
Cat. No.	Description		
VSTAR-PH	Orion VERSA STAR pH/temperature module		
VSTAR-ISE	Orion VERSA STAR pH/ISE/temperature module		
VSTAR-CND	Orion VERSA STAR conductivity/temperature module		
VSTAR-RD	Orion VERSA STAR RDO/DO/temperature module		
VSTAR-LR	Orion VERSA STAR pH/temperature with LogR technology module		
STARA-BEA	Benchtop electrode arm for Orion Star A-series meters		
STARA-HB	Freestanding base for use with Orion Star A-series benchtop electrode arm		
STARA-PWR	Replacement universal power adapter for Orion VERSA STAR meters		
096019	Orion Star stirrer probe		
8102BNUWP	Orion ROSS Ultra pH electrode, refillable, glass body		
8172BNWP	Orion ROSS Sure-Flow pH electrode, glass body		
8156BNUWP	Orion ROSS Ultra refillable pH electrode, epoxy body		
8157BNUMD	Orion ROSS Triode pH/ATC electrode, refillable, epoxy body		
8302BNUMD	Orion ROSS Triode pH/ATC electrode, refillable, glass body		
927007MD	Orion ATC probe, stainless steel body		
927005MD	Orion ATC probe, epoxy body		
013005MD	Orion DuraProbe conductivity cell, 4-cell, K=0.475		
013016MD	Orion conductivity cell, flow through, K=0.1		
083005MD	Orion dissolved oxygen probe, polarographic		
086030MD	Orion auto-stir DO/BOD probe, polarographic		
087010MD	Orion RDO optical DO probe, 3 m cable		
810199	Orion ROSS all-in-one pH buffer kit		
910104	Orion pH 4.01 buffer, 475 mL		
910107	Orion pH 7.00 buffer, 475 mL		
910110	Orion pH 10.01 buffer, 475 mL		
011008	Orion conductivity standard, 100 µS/cm, 5 x 60 mL bottles		
011007	Orion conductivity standard, 1413 µS/cm, 5 x 60 mL bottles		
011006	Orion conductivity standard, 12.9 mS/cm, 5 x 60 mL bottles		
1010001	Orion conductivity calibration resistor kit		
9512HPBNWP	Orion high-performance ammonia ISE		
9512BNWP	Orion standard ammonia ISE		
951007 951210	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 Ammonia ISE storage solution		
9609BNWP	Orion fluoride combination ISE		
040906			
040906	Fluoride standard, 1 ppm with TISAB II, 475 mL		
040907	Fluoride standard, 2 ppm with TISAB II, 475 mL		
940909	Fluoride standard, 10 ppm with TISAB II, 475 mL TISAB II, 1 gallon		
8611BNWP	Orion ROSS sodium combination ISE with sodium standards		
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ISE

ORP

Cond

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Temp