

Water Quality Meters

Thermo Scientific Orion Star A Portable Meters

The Orion Star A series offers a diverse line of newly designed single and multi-parameter instruments for a wide variety of applications. They incorporate features that will enhance your water quality monitoring and analysis programs.

FEATURES

- Meters are easy to use with plain language screen prompts, soft keys that update for easy selection and a multi-language 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 and ready indicator alerts when readings are stable
- 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
- Three year meter replacement warranty



Orion Star A223
DO/RDO Meter

Orion Star A324
pH/ISE Meter

Orion Star A329
pH/ISE/Con/
RDO/DO Meter

ORION STAR A SERIES MODELS

Single Parameter Instruments

Orion Star A221 pH Meter

- Simultaneous measurement of pH and temperature

Orion Star A222 Conductivity Meter

- Flexible direct and auto-calibration
- Provides reliable conductivity, salinity, TDS, and temperature measurements

Orion Star A223 & A323 Dissolved Oxygen/RDO Meter

- Salinity correction and automatic barometric compensation
- Simultaneous display of DO and temperature readings

Dual Parameter Instruments

Orion Star A324 pH/ISE Meter

- Simultaneous measurement of pH and ISE with temperature
- Accepts ISFET (Ion Selective Field Effect Transistor) electrodes

Orion Star A325 pH/Conductivity Meter

- Accepts ISFET (Ion Selective Field Effect Transistor) electrodes
- Simultaneous display of pH, conductivity and temperature measurements
- Reliable and accurate pH, conductivity, resistivity, salinity, TDS and temperature measurements for soil and water analysis applications

Orion Star A326 pH/Dissolved Oxygen/RDO Meter

- Salinity correction and automatic barometric pressure compensation
- Dissolved oxygen calibration to the Winkler Titration for BOD
- Simultaneous display of pH, DO and temperature measurements

Orion Star A329

Multi-Parameter Instrument

All of the parameters in one instrument

Features Include:

- pH, ISE, DO/RDO, and conductivity measurements in one waterproof, hand-held unit
- Simultaneous display of pH or ISE, conductivity, DO and temperature measurements

Accessory Options Include:

- Calibration buffers/solutions
- Full kits with everything you need are available
- Replacement electrodes

CALL GEOTECH TODAY (800) 833-7958

Geotech Environmental Equipment, Inc.

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SPECIFICATIONS

pH	Range	-2.000 to 20.000
	Resolution	0.1, 0.01, 0.001
	Relative Accuracy	±0.002
	Calibration Points	1 to 5 points
ISE	Range/Resolution	0 to 19999/up to 3 significant digits
	Relative Accuracy	±0.2 mV or 0.05% of reading, whichever is greater
	Units	ppm, M, mg/L, %, ppb, or none
	Calibration Points	Up to 5
	Calibration Features	Timed end point, linear point to point, non-linear selectable autoblack, low concentration range stability
mV/RmV	Range	±2000.0 mV
	Resolution	0.1
	Relative Accuracy	±0.2 mV or 0.05% of reading, whichever is greater
	E _H ORP Mode	Yes
Conductivity	Range	0.001 µS to 3000 mS
	Resolution	0.001 µS minimum, 4 significant figures minimum
	Relative Accuracy	0.5% reading ±1 digit
	Compatible Cell Constants	0.001 to 199.9
	Calibration Points	Up to 5 points
	Reference Temperature	15°, 20°, 25° C
	Temperature Compensation	Linear (0 to 10.0%/°C), nLn
Resistivity	Range	2 ohm to 100 mega-ohm
	Resolution	2 ohms-cm
	Relative Accuracy	0.5% reading ±1 digit
Salinity	Type	Practical salinity
	Range	0.01 to 80.0 ppt NaCl equivalent, 0.01 to 42 ppt practical salinity
	Resolution	.01
	Relative Accuracy	±0.1
TDS	Range	0 to 200 ppt
	Resolution	4 significant digits
	Relative Accuracy	±0.5% reading ±1 digit
	TDS Factor Range	Linear 0.01 to 10.00

DO	Concentration – Polarographic	
	Range	0 to 90 mg/L
	Resolution	0.01, 0.1
	Relative Accuracy	±0.2
	% Saturation – Polarographic	
	Range	0 to 600
	Resolution	0.1, 1
	Relative Accuracy	±2%
		Concentration – RDO
Range		0 to 50 mg/L
Resolution		0.01, 0.1
	Relative Accuracy	±0.1 mg/L up to 8 mg/L, ±0.2 mg/L from 8 to 20 mg/L, 10% of reading from 20 to 50 mg/L
	% Saturation – RDO	
	Range	0 to 500
	Resolution	0.1, 1
	Relative Accuracy	±2%
	Manual Barometric Pressure Correction	450.0 to 850.0 mm Hg
Manual Salinity Factor Correction	0 to 45 ppt	
Calibration Features	Water saturated air, air saturated water, manual (Winkler) and zero point	
Probe Characteristics	Polarographic or RDO	
Temperature	Range	-5 to 105°C (23 to 221°F)
	Resolution	0.1
	Relative Accuracy	±0.1°C
	Offset Calibration	1 point
Inputs/Outputs	Sensor Inputs	Conductivity – 8-pin miniDIN DO with temp. probe – 9-pin miniDIN ATC-miniDIN – Locking, pH electrode – BNC, reference pin
	Datalogging	
	Memory	With time and date stamp
	Log Function	Manual, Automatic with AUTO-READ™
	Log Edit	Delete last reading or all
Power	AC Adapter (Optional)	Universal, 100-240 VAC
	Battery Power (Included)	4 x AA batteries
	Battery Life	800 hours
Regulatory and Safety		CE, TÜV, FCC

Above data generated under optimal/controlled circumstances.

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