

Thermo Scientific Orion Star A223

Advanced RDO/dissolved oxygen portable meter

The Thermo Scientific™ Orion™ Star A223 RDO/Dissolved Oxygen Portable Meter makes necessary testing easier. Its durability and dependability make it a great choice for samples every day, anywhere.



Get the readings that you need where you need them with the Thermo Scientific Orion Star A223 RDO/Dissolved Oxygen Portable Meter. The large, backlit graphic LCD display shows dissolved oxygen in percent saturation or concentration with temperature and electrode status, time, date and compensation settings.

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
- Compatible with Orion RDO optical and Orion polarographic DO probes
- Accurate results are easy with automatic temperature, manual salinity and automatic/manual barometric pressure compensation
- Don't miss a reading—AUTO-READ™ locks in the stable reading on your screen and ready indicator alerts when continuous readings are stable
- Calibrate using water-saturated air, air-saturated water, custom value using a Winkler titration or zero point calibration
- Non-volatile memory holds up to 1000 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

Thermo
SCIENTIFIC

Thermo Scientific Orion Star A223 RDO/Dissolved Oxygen Portable Meter

Specifications	
Dissolved Oxygen	<p>Concentration—Polarographic Range: 0 to 90 mg/L Resolution: 0.01, 0.1 mg/L Relative Accuracy: ± 0.2 mg/L or ± 2 % of reading, whichever is greater</p> <p>% Saturation—Polarographic Range: 0 to 600 % saturation Resolution: 0.1, 1 % saturation Relative Accuracy: ± 2 % saturation or ± 2 % of reading, whichever is greater</p> <p>Concentration—RDO Range: 0 to 50 mg/L Resolution: 0.01, 0.1 mg/L 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</p> <p>% Saturation—RDO Range: 0 to 500 % saturation Resolution: 0.1, 1 % saturation Relative Accuracy: ± 2 % sat. ≤ 200 % sat., ± 10 % sat. > 200 % sat.</p> <p>Barometric Pressure Correction: 400 to 850 mmHg, automatic or manual</p> <p>Manual Salinity Factor Correction: 0 to 45 ppt</p> <p>Calibration Features: Water-saturated air, air saturated water, manual (Winkler) and zero point</p>
Temperature	<p>Range: 0 to 50 °C, 32 to 122 °F Resolution: 0.1 °C, 0.1 °F Relative Accuracy: ± 0.1 °C, ± 0.1 °F Offset Calibration: 1 point</p>
Datalogging	<p>Memory: 1000 with time and date stamp Log Function: Manual, Automatic with AUTO-READ</p>
Inputs	DO Probe with Built-in Temperature: 9-pin mini-DIN
Output	RS232, USB
Power	<p>AC Adapter: Optional—universal, 100-240 VAC Battery Power: Included—4 AAs Battery Life: 800 hrs</p>



Thermo Fisher Scientific
 Water Analysis Instruments
 Chelmsford, MA USA
 Quality Management System
 Registered to ISO 9001

thermoscientific.com/water

© 2013 Thermo Fisher Scientific Inc. All rights reserved. Certified System StandardsMark logo is a trademark of SAI Global. All other trademarks are the property of Thermo Fisher Scientific Inc. & its subsidiaries



Water Analysis Instruments

North America
 Toll Free: 1-800-225-1480
 Tel: 1-978-232-6000
 info.water@thermo.com

Netherlands
 Tel: (31) 020-4936270
 info.water.uk@thermo.com

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

India
 Tel: (91) 22-4157-8800
 wai.asia@thermofisher.com

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

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

Australia
 Tel: (613) 9757-4300
 in Australia (1300) 735-295
 InfoWaterAU@thermofisher.com

S-STARA223-E 1213 Rev C

Meter Ordering Information

Part No.	Description
STARA2230	Orion Star A223 RDO/Dissolved Oxygen Portable Meter - Four AA batteries (installed) - Printed quick start guide and literature CD - USB computer cable
STARA2235	Orion Star A223 RDO/Dissolved Oxygen Portable Meter Kit - 087010MD Orion RDO optical probe with 3 m cable, stainless steel guard, calibration sleeve and optical cap - Protective armor with electrode holder - Hard-sided field case - Four AA batteries (installed) - Printed quick start guide and literature CD - USB computer cable

Accessories Ordering Information

Part No.	Description
STARA-CS	Orion Star A series portable meter hard-sided field case
1210005	Orion Star A series portable meter soft-sided field case
STARA-AR	Orion Star A series portable meter armor with pH electrode holder, conductivity and DO probe holder, stand and adjustable hand-strap
STARA-ESCD	Orion conductivity and DO probe holder for portable Star A series meter armor
1010003	Universal power adapter, 100-240 V, 50/60 Hz
087010MD	Orion RDO optical DO probe, 3 m cable with stainless steel guard and calibration sleeve
087020MD	Orion RDO optical DO probe, 6 m cable with stainless steel guard and calibration sleeve
087030MD	Orion RDO optical DO probe, 10 m cable with stainless steel guard and calibration sleeve
087050MD	Orion RDO optical DO probe, 15 m cable with stainless steel guard and calibration sleeve
087100MD	Orion RDO optical DO probe, 30 m cable with stainless steel guard and calibration sleeve
083005MD	Orion polarographic DO probe, 1.5 m cable
080513	Orion polarographic DO probe maintenance kit
087001	Replacement optical cap for Orion RDO probes

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.



Thermo
 SCIENTIFIC

Part of Thermo Fisher Scientific