The Thermo Scientific Orion Star
A213 RDO/Dissolved Oxygen
Benchtop Meter works for any lab
or application. Its durability and
dependability make it ideal for every
BOD sample, every day.

# Thermo Scientific Orion Star A213 RDO/Dissolved Oxygen Benchtop Meter







The Thermo Scientific Orion Star A213 RDO/Dissolved Oxygen (DO) Benchtop Meter is the ideal choice for any lab. Get the information you need quickly and easily from the large, backlit graphic LCD display. Informative display shows dissolved oxygen in percent saturation or concentration and temperature along with time, date, sample ID, user ID and calibration information. For advanced users, features such as stability and averaging choices provide additional options.

#### **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
- No need to worry about D0 probe compatibility – the meter accepts and automatically recognizes Orion polarographic and RD0 optical/ luminescence-based probes
- Accurate results are easy with automatic temperature, manual salinity and your choice of automatic or manual barometric pressure compensation

- Don't miss a reading AUTO-READ<sup>™</sup> locks in the stable reading on your screen, ready indicator alerts when readings are stable and timed reading gathers data in specific time intervals
- Calibrate using water-saturated air, air-saturated water, a Winkler titration or zero point calibration
- Non-volatile memory holds up to 2000 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
- For faster BOD readings, control the Orion AUTO-STIR™ polarographic DO probe (086030MD, sold separately) directly from the meter
- 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 with the included universal power adapter, or use four AA batteries (sold separately) to run the meter on DC power
- IP54-rated housing handles splashes and is wall-mountable if table space is a problem
- 3 year meter replacement warranty



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### **Specifications**









Dissolved Oxygen	Concentration - Polaro	graphic
	Range	0 to 90 mg/L
	Resolution	0.01, 0.1
	Relative Accuracy	±0.2
	% Saturation - Polarog	raphic
	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 %
	Automatic 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
	<b>Probe Characteristics</b>	Polarographic or RDO
Temperature	Range	0 to 50 °C, 32 to 122 °F
	Resolution	0.1
	Relative Accuracy	±0.1
	Offset Calibration	1 point
Datalogging	Number of Points	2000 with time and date stamp
	Log Function	Manual, ready (includes AUTO-READ™), timed
	Log Edit	Delete individual points, group of points or all
Inputs	DO with Temperature Probe	9-pin mini-DIN
Output		RS232, USB
Power	AC Adapter	Included – universal, 100-240 VAC
	Battery Power	Optional – 4 AAs
	Battery Life	800 hrs

### **Ordering Information**

Cat. No.	Description	
STARA2130	Orion STAR A213 Dissolved Oxygen Benchtop Meters - Electrode arm with redesigned holder - Universal power adapter	
STARA2135	Orion STAR A213 Dissolved Oxygen Benchtop Meter Kit  - 083005MD Orion polarographic DO probe with calibration sleeve  - 080513 polarographic DO probe maintenance kit - 970802 BOD funnel/stirrer  - 080360 BOD adapter  - Electrode arm with redesigned holder  - Universal power adapter	
STARA2136	Orion STAR A213 Dissolved Oxygen Benchtop Meter Kit with Self-Stirring Probe  - 086030MD Orion polarographic AUTO-STIR DO/BOD probe - 080513 DO probe maintenance kit - 080514 polarographic DO probe electrolyte solution - Electrode arm with redesigned holder - Universal power adapter	
Accessories		
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	
083005MD	Orion polarographic DO probe, 1.5m cable	
086030MD	Orion polarographic AUTO-STIR DO/BOD probe, 1.5m cable	
087010MD	Orion RDO optical DO probe, 3m cable with stainless steel guard and calibration sleeve	
080513	Orion polarographic DO probe maintenance kit	
080514	Orion polarographic DO probe electrolyte solution, 60 mL	
080017	Calibration sleeve for Orion polarographic DO probes	
087003	Replacement calibration sleeve for Orion RDO optical probes	
087001	Replacement optical cap for Orion RDO probes	
970802	Orion BOD funnel and stirrer for use with polarographic probes	
080360	Orion BOD bottle adapter for use with polarographic 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.

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