



SMARTROLL™ RDO® Handheld

Hold the future of dissolved oxygen monitoring in your hand.

The SMARTROLL Rugged Dissolved Oxygen (RDO) Handheld combines the industry-leading optical DO sensor with revolutionary smartphone mobility. The intuitive iSitu™ Application eliminates training time and runs on your iPhone®, iPod touch®, or iPad® device. The SMARTROLL RDO Handheld simultaneously measures four parameters:

- Dissolved oxygen with EPA-approved RDO methods
- Barometric pressure
- Air temperature
- Water temperature

Simply connect the SMARTROLL RDO Probe to a battery pack, launch the iSitu App, and start reading results. No warm-up time or tedious setup. The iSitu App guides you through spot checks, calibrations, and data management.

Be Mobile

- **Use the SMARTROLL RDO anywhere**—Reduce field equipment requirements for routine monitoring.
- **Instantly collaborate with colleagues**—Use a wired or wireless connection to send real-time snapshots of data.
- **Streamline data management**—Consolidate all site information on your smartphone and tag data with site photos and GPS coordinates. Log data to your smartphone and download results in a standard file format.

Be Smart

- **Eliminate errors**—The RDO Sensor automatically recognizes calibration solutions, stores calibration data in the sensor, and performs diagnostics. Start monitoring immediately—the sensor is pre-calibrated at the factory.
- **Reduce maintenance**—The robust RDO Sensor stands up to field use and calibrations last for months.
- **Get accurate DO results**—Internal logic automatically compensates for barometric pressure and allows for manual salinity corrections.

Be In-Situ

- Receive free application guidance, 24/7 technical support, and mobile help in the field.
- Order supplies from the In-Situ e-store with your smartphone.
- Get guaranteed 7-day service for maintenance (U.S.A. only).

Applications

- Ambient water quality spot checks in freshwater and saltwater
- Dam water sampling
- Effluent monitoring
- Stormwater management

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Specifications

General	SMARTROLL Rugged Dissolved Oxygen (RDO) Handheld Instrument					
Operating temp.	-5 to 50° C (23 to 122° F)					
Storage temp.	-40 to 65° C (-40 to 149° F)					
Dimensions & weight	Dimensions: 2.8 cm (1.1 in.) OD x 16.8 cm (6.6 in.) with restrictor (does not include connector). Weight: 255 g (0.56 lbs).					
Wetted materials	316 stainless steel, titanium, Acetal, Viton®, PC/PMMA					
Environmental rating	Probe: IP68 with all sensors and cable attached. IP67 with sensors removed and cable detached. Battery pack: IP67 with battery cover closed.					
Reading rate	1 reading every 10 seconds; data logged to smartphone.					
Power	6 VDC from battery pack					
Interface	iPhone® 4S, iPod touch® 5, or iPad® 3, 4, mini or later; iOS 6.0 or later. BLE radio. Purchase the iSitu™ App at the Apple® App Store.					
Cable	Black polyurethane. Standard lengths available: 1.5 m, 4.6 m, 9.1 m (5 ft, 15 ft, 30 ft)					
Standard Sensors	Accuracy	Range	Resolution	Units of Measure	Response Time	Method
Dissolved oxygen RDO® Fast Cap (optical sensor)	±0.1 mg/L ±0.2 mg/L ±10% of reading	0 to 8 mg/L 8 to 20 mg/L 20 to 50 mg/L Full operating range: 0 to 50 mg/L	0.01 mg/L	mg/L, % saturation, ppm	T90: <30 sec. T95: <45 sec.	EPA-approved In-Situ Methods 1002-8-2009 1003-8-2009 1004-8-2009
Temp., sample (probe)	±0.1° C	-5 to 50° C (23 to 122° F)	0.01° C or better	Celsius, Fahrenheit	<30 sec.	EPA 170.1
Barometric pressure (battery pack)	±3 mbar max.	300 to 1100 mbar	0.01 mbar	psi, kPa, bar, mbar, mmHg, inHg, Torr, atm	Instantaneous in thermal equilibrium	Piezoresistive pressure sensor
Temp., air (battery pack)	±2° C	-20 to 70° C (-4 to 158° F)	0.1° C	Celsius, Fahrenheit	<30 sec.	EPA 170.1
Warranty	2-year warranty on probe. 1-year warranty on battery pack. 1-year warranty on cable.					
Notes	Specifications are subject to change without notice. Apple, iPhone, iPod touch, and iPad are trademarks of Apple Inc. registered in U.S. and other countries. Viton is a registered trademark of DuPont Performance Elastomers L.L.C.					



View results instantly on your smartphone.



Recognize sites with photo and GPS tags.



Get accurate results and long-lasting calibrations.



Call to purchase—www.in-situ.com

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1-800-446-7488 (toll-free in U.S.A. and Canada)

1-970-498-1500 (U.S.A. and international)

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