

# SMARTROLL<sup>™</sup> RDO<sup>®</sup> 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 VuSitu™ mobile app eliminates training time and runs on your Android™ device and the iSitu° mobile app on your iOS™ 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/power pack, launch the mobile app and start reading results. No warm-up time or tedious setup. The Mobile 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 .csv file format.

#### CALL OR CLICK TO PURCHASE OR RENT 1-800-446-7488 (toll-free in U.S.A. and Canada) 1-970-498-1500 (U.S.A. and international)

WWW.IN-SITU.COM

#### **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: Smart sensor technology including automatic salinity and barometric pressure compensation.

#### **Be In-Situ**

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

#### Applications

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

### SMARTROLL<sup>™</sup> RDO<sup>®</sup> Handheld

Spec Sheet



SMARTROLL Rugged Dissolved Oxygen (RDO) Handheld Instrument					
-5 to 50° C (23 to 122° F)					
-40 to 65° C (-40 to 149° F)					
Dimensions: 2.8 cm (1.1 in.) 0D x 16.8 cm (6.6 in.) with restrictor (does not include connector). Weight: 255 g (0.56 lbs).					
316 stainless steel, titanium, Acetal, Viton°, PC/PMMA					
Probe: IP68 with all sensors and cable attached. IP67 with sensors removed and cable detached. Battery pack: IP67 with battery cover closed. Power Pack: IP67					
1 reading every 10 seconds; data logged to smartphone.					
6 VDC from battery pack for iOS; 5 VDC from power pack for Android™					
iOS: iPhone <sup>®</sup> 4S, iPod touch <sup>®</sup> 5, or iPad <sup>®</sup> 3, 4, mini or later; iOS <sup>™</sup> 6.0 or later. BLE radio. Download the iSitu <sup>®</sup> App at the Apple <sup>®</sup> App Store. Used with iOS <sup>™</sup> battery pack. Android <sup>™</sup> platform 4.4 (requires Bluetooth <sup>®</sup> 2.0). Download the VuSitu <sup>™</sup> App on the Google Play <sup>™</sup> store. Used with Android <sup>™</sup> PowerPack.					
Black polyurethane. Standard lengths available: 1.5 m, 4.6 m, 9.1 m (5 ft, 15 ft, 30 ft)					
Accuracy	Range	Resolution	Units of Measure	Response Time	Method
$\pm$ 0.1 mg/L $\pm$ 0.2 mg/L $\pm$ 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
±0.1°C	-5 to 50° C (23 to 122° F)	0.01° C or better	Celsius, Fahrenheit	<30 sec.	EPA 170.1
±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
±2°C	-20 to 70° C (-4 to 158° F)	0.1° C	Celsius, Fahrenheit	<30 sec.	EPA 170.1
2-year warranty on probe. 1-year warranty on battery pack/power pack. 1-year warranty on cable.					
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. Android is a trademark of Google Inc. Viton is a registered trademark of DuPont Performance Elastomers L.L.C. * Response time is typical when moving from air to ambient water temperature.					
	-5 to 50° C (23 to 122° F) -40 to 65° C (-40 to 149° Dimensions: 2.8 cm (1. 316 stainless steel, titani Probe: IP68 with all sen 1 reading every 10 secon 6 VDC from battery pack iOS: iPhone" 4S, iPod tou Android: Android <sup>™</sup> plat Black polyurethane. Star Accuracy $\pm 0.1 mg/L$ $\pm 0.2 mg/L$ $\pm 10\%$ of reading $\pm 0.1°$ C $\pm 3$ mbar max. $\pm 2°$ C 2-year warranty on prob Specifications are subject Google Inc. Viton is a reg	-5 to 50° C (23 to 122° F) $-40 to 65° C (-40 to 149° F)$ Dimensions: 2.8 cm (1.1 in.) 0D x 16.8 cm (6.6 in.) with 316 stainless steel, titanium, Acetal, Viton*, PC/PMMA Probe: IP68 with all sensors and cable attached. IP67 with 1 reading every 10 seconds; data logged to smartphone 6 VDC from battery pack for iOS; 5 VDC from power pack iOS: iPhone* 4S, iP0d touch* 5, or iPad* 3, 4, mini or late Android: Android** plattor 4.4 (requires Bluetooth* 2 Black polyurethane. Stattor 4.4 (requires Bluetooth* 2 sto 20 mg/L ± 10% of reading ± 20 to 50° C (-20 to 70° C (-4 to 158° F) 2-year warranty on probe: 1-year warranty on battery polyurethane. Stattor 4.4 (requires f) Specifications are subject to change without notice. App Google Inc. Viton is a registered trademark of DuPont Particular 4.4 (requires f) Specifications are subject to change without notice. App Google Inc. Viton is a registered trademark of DuPont Particular 4.4 (requires f) Specifications are subject to change without notice. App Google Inc. Viton is a registered trademark of DuPont Particular 4	-5 to 50° C (23 to 122° F)-40 to 65° C (-40 to 149° F)Dimensions: 2.8 cm (1.1 in.) 0D x 16.8 cm (6.6 in.) with restrictor (does not inclust 316 stainless steel, titanium, Acetal, Viton", PC/PMMAProbe: IP68 with all sensors and cable attached. IP67 with sensors removed and 1 reading every 10 seconds; data logged to smartphone.6 VDC from battery pack for iOS; 5 VDC from power pack Tor Android™6 VDC from battery pack for iOS; 5 VDC from power pack Tor Android™IOS: iPhone *45, iPod touch* 5, or iPad* 3, 4, mini or later; iOS™ 6.0 or later. BLE ra Android: Android™ platform 4.4 (requires Bluetooth* 2.0). Download the VuSituBlack polyurethane. Starter lengths available: 1.5 m, 4.6 m, 9.1 m (5 ft, 15 ft, 3)AccuracyRange±0.1 mg/L ±0.2 mg/L ±10% of reading±0.1°CC20 to 50 mg/L Full operating range: 0 to 50 mg/L±0.1°C-5 to 50° C (23 to 122° F)±3 mbar max.300 to 1100 mbar2-year warranty on probe. I-year warranty on battery pack. 1-year warsanty on battery pack. 1-year warsanty of DuPont Performance Elastomers L.1Specifications are subject to change without notice. Apple, iPhone, iPod touch, ar Google Inc. Viton is a registered trademark of DuPont Performance Elastomers L.1	$-5 \text{ to } 50^{\circ} \text{ C} (23 \text{ to } 122^{\circ} \text{ F})$ $-40 \text{ to } 65^{\circ} \text{ C} (-40 \text{ to } 149^{\circ} \text{ F})$ Dimensions: 2.8 cm (1.1 in.) 0D x 16.8 cm (6.6 in.) with restrictor (does not include connector). Weight: 255 g (23 \text{ to } 1316 \text{ stainless steel, titanium, Acetal, Viton*, PC/PMMA} Probe: IP68 with all sensors and cable attached. IP67 with sensors removed and cable detached. Battery pack: 1 reading every 10 seconds; data logged to smartphone. 6 VDC from battery pack for iOS; 5 VDC from power pack for Android** 105: iPhone* 45, iP0d touch* 5, or iPad* 3, 4, mini or later; i05 <sup>sm</sup> 6.0 or later. BLE radio. Download the iSitu* App at Android: Android** platform 4.4 (requires Bluetooth* 2.0). Download the VuSitu** App on the Google Play** store Black polyurethane. 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Pow 1 reading every 10 seconds; data logged to smartphone. 6 VDC from battery pack for iO5; 5 VDC from power pack for Android <sup>114</sup> 105: IPhone' 45, IP0d touch' 5, or iPad' 3, 4, mini or later; IOS" 6.0 or later, BLE radio. Download the iSitu" App at the Apple' App Store. Used with Android" 105: IPhone' 45, IP0d touch' 5, or iPad' 3, 4, mini or later; IOS" 6.0 or later, BLE radio. Download the iSitu" App at the Apple' App Store. Used with Android" PowerPack. 81ack polyurethane. Standard lengths available: 1.5 m, 4.6 m, 9.1 m (5 ft, 15 ft, 30 ft) Accuracy 8 ange # 0.1 mg/L 10 to 8 mg/L 2.0 to 8 mg/L 2.0 to 8 mg/L 2.0 to 9 mg/L Full operating range: 0 to 5 on g/L 4:0.1 mg/L 2.0 to 1100 mbar 2.0 to 100 mbar 2.0 to 100 mbar 2.0 to 70° C (-4 to 158° F) 2.0 to 70° C 2.0 to 70° C (-4 to 158° F) 2.0 to change without notice. Apple, iPhone, iPod touch, and iPad are trademarks of Apple Inc. registered in US. and other cour 6 configuration is a resubject to change without notice. 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