

# Handheld Optical Dissolved Oxygen Meter

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## YSI ProODO™ Instrument & ProOBOD Probe

The new ProODO™ provides traditional YSI quality in a handheld dissolved oxygen instrument with luminescent optical dissolved oxygen (DO) technology. The ProODO utilizes “smart” digital sensor technology which stores calibration data within the sensor. This allows probes to be placed on any ProODO instrument without re-calibration. YSI ODO technology reduces the time required to calibrate and maintain sensors while utilizing a user replaceable sensing element that requires approximately an annual replacement. There are no electrodes to clean or solutions to change. Based on usage, calibrations can be stable for up to one year and are stored in each sensor.

### FEATURES

- Expanded DO range of 0-500% with a response time of T90 in 15 seconds
- Non-consumptive luminescent method eliminates need for stirring
- Optical technology increases DO accuracy and eliminates probe fouling by common gases such as hydrogen sulfide
- Easy to read graphic, backlit display and keypad for use in any lighting condition
- Truly field-worthy, impact resistant, IP-67 waterproof case and connectors; rubber over molded, non-slip case, for extra durability and grip
- User-replaceable cables in lengths of 1 to 100 meters; cable management kit included with 4 meter and longer cables
- USB connection allows interaction with powerful desktop Data Manager software
- Stores 5000 data sets (sensor data, date, time, site and user defined information)
- Multiple languages include English, Spanish, French, Italian, Norwegian, Portuguese and German. Asian language support in the future.
- 3-year instrument warranty; 2-year cable and probe warranty



*The ProODO is a digital signal instrument. Any ProODO cable can be connected and used on any ProODO instrument. The luminescent optical probes hold the calibration information internally.*

**CALL GEOTECH TODAY (800) 833-7958**

**Geotech Environmental Equipment, Inc.**

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## YSI ProODO™ Instrument

### SYSTEM SPECIFICATIONS (instrument with cable and probe)

<b>Dissolved Oxygen (% saturation)</b>	<b>Sensor Type</b>	Optical (dynamic luminescence quenching lifetime detection)
	<b>Range</b>	0 to 500% air saturation
	<b>Accuracy</b>	0 to 200% air saturation, ±1% of the reading or ±1% air saturation, whichever is greater; 200 to 500% air saturation, ±15% of the reading
	<b>Resolution</b>	0.1% air saturation
<b>Dissolved Oxygen (mg/L)</b>	<b>Sensor Type</b>	Optical (dynamic luminescence quenching lifetime detection)
	<b>Range</b>	0 to 50 mg/L
	<b>Accuracy</b>	0 to 20 mg/L, ±0.1 mg/L or ±1% of reading, whichever is greater; 20 to 50 mg/L, ±15% of the reading
	<b>Resolution</b>	0.01 or 0.1 mg/L (auto-scaling)
<b>Temperature (°C, °F, °K)</b>	<b>Range</b>	-5 to 70°C
	<b>Accuracy</b>	±0.2°C
	<b>Resolution</b>	20.01°C
<b>Barometer (mmHg, inHg, mBar, Psi, KPa)</b>	<b>Range</b>	375 to 825 mmHg
	<b>Accuracy</b>	±1.5 mmHg from 0 to 50°C
	<b>Resolution</b>	0.1 mmHg

### ADDITIONAL SPECIFICATIONS

<b>Storage Temperature</b>	-20 to 70°C
<b>Dimensions</b>	8.3 cm width x 21.6 cm length x 5.6 cm depth (3.25 in. x 8.5 in. x 2.21 in.)
<b>Weight with Batteries</b>	475 grams (1.05 lbs.)
<b>Probe Dimensions</b>	19 cm length (7.5 in.); 2.4 cm diameter (0.95 in.)
<b>Power</b>	2 alkaline C-cells; approximately 80 hours - ambient conditions in manual sampling mode
<b>Cable Lengths*</b>	1, 4, 10, 20, 30, 40, 50, 60, and 100 meter; (3.3, 13.1, 32.8, 65.6, 98, 131, 164, 197 and 328 feet)
<b>Connectors</b>	MS (military spec) waterproof with bayonet lock
<b>Warranty</b>	3-year instrument; 2-year cable and probe; 1-year sensor cap
<b>Salinity Input Range</b>	0-70 ppt; manual (automatically compensates for manual input value)
<b>Data Memory</b>	5000 data sets (sensor data, date, time, site and user defined information)
<b>Flow Dependence</b>	None
<b>Typical Response Time</b>	90% of reading within 25 seconds; 95% in 45 seconds
<b>Calibration</b>	DO – one point or two point with a zero % value; barometer – one point
<b>Languages</b>	English, Spanish, German, French, Italian, Norwegian, Portuguese; Asian language support in the future
<b>Certifications</b>	RoHS, CE, WEEE, C-Tick, VCCI, IP-67, 1-meter drop test, Assembled in USA
<b>Connectivity</b>	USB 2.0; communications saddle and USB cable included
<b>Data Management</b>	Data Manager desktop software included; 100 user defined folders and site names
<b>User ID</b>	Optional User ID for data security
<b>Measurement/Logging Modes</b>	Automatic and Manual sampling modes/Continuous and Interval logging modes
<b>GLP Compliant</b>	Yes
<b>Probe/Sensor Materials</b>	The following materials may come into contact with the sampling environment: Xenoy® PBT Polycarbonate Blend, Noryl, Stainless Steel, Titanium, Polyurethane, Santoprene, Acrylic, Polystyrene

### SEPARATE ORDER ITEMS

ProODO handheld instrument  
Replacement sensing element (included with initial probe purchase)  
1 meter probe/cable for DOtemp  
4 meter probe/cable for DOtemp (includes cable management kit)  
10 meter probe/cable for DOtemp (includes cable management kit)  
20 meter probe/cable for DOtemp (includes cable management kit)  
30 meter probe/cable for DOtemp (includes cable management kit)  
40 meter probe/cable for DOtemp (includes cable management kit)  
50 meter probe/cable for DOtemp (includes cable management kit)  
60 meter probe/cable for DOtemp (includes cable management kit)  
100 meter probe/cable for DOtemp (includes cable management kit)

### ACCESSORIES

Soft-sided carrying case  
Hard-sided carrying case  
Belt clip to attach instrument to belt  
Ultra clamp (attach to instrument to secure it to a desk, boat, etc)  
Small tripod (attach to instrument to sit on any flat surface)  
Cable management kit (included with 4 through 100 meter cables)  
Cable weight, 4.9 oz, attach to stainless steel probe guard

\* Special order cable lengths up to 100 meters in 10 meter increments available.

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## YSI ProOBOD Probe

The YSI ProOBOD probe is used with the YSI ProODO handheld optical dissolved oxygen instrument. The ProODO instrument is a rugged, durable handheld for the lab or field. The instrument boasts a 3-year warranty and comes with YSI's exclusive Data Manager desktop software, USB cable, and ProComm II communications saddle.

The ProOBOD easily connects to the ProODO handheld and makes it convenient to conduct lab BOD's with a very compact footprint.

### FEATURES

- Smart sensor retains calibration in the probe
- User-replaceable, low-maintenance sensor with +1-year life
- 2-year warranty; reliable and serviceable, design reduces cost-of-ownership and reduces down-time
- Probe body tapered to fit into a standard 300 mL BOD bottle and international versions
- Extremely quiet operation
- No warm-up time required
- Self-stirring to provide representative sample and increase response times

YSI ProOBOD Probe inserted into BOD bottle and connected to the YSI ProODO instrument. All are mounted to the YSI Lab Dock.



### SPECIFICATIONS

<b>Accuracy:</b>	mg/L	0-20 mg/L, $\pm 0.1$ mg/L or $\pm 1\%$ reading, whichever greater; 20-50 mg/L, $\pm 15\%$ reading
	% Air	0-200%, $\pm 1\%$ reading or $\pm 1\%$ , whichever greater; 200-500%, $\pm 15\%$ reading
	Temperature	$\pm 0.2^\circ$ C
<b>Range:</b>	mg/L	0-50 mg/L
	% Air	0-500% air saturation
	Temperature	Ambient (10 to $+40^\circ$ C); Compensation ( $-5$ to $+50^\circ$ C)
<b>Resolution:</b>	mg/L	0.01
	% Air	0.1%
	Temperature	0.1 $^\circ$ C
<b>Warranty:</b>		2-years; 1-year sensor cap
<b>Cable Length:</b>		2-meters (6 feet)
<b>Power:</b>		External 110-230 VAC power supply with DC input to sensor
<b>Sensor Type:</b>		Optical; dynamic luminescence quenching lifetime detection
<b>Response Time:</b>		T95 = 22 seconds with stirring; T95 = 40 seconds without stirring
<b>IP Rating:</b>		IP65
<b>Certifications:</b>		RoHS, CE, WEEE, Assembled in USA

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