ProODO®

Optical Dissolved Oxygen Meter for the Lab or Field

SPECIFICATIONS

YSI®

a **xylem** brand

ProODO

Digital Optical Dissolved Oxygen Meter

YSI ODO® technology reduces the time required to calibrate and maintain your sensors. And the user-replaceable sensing element only needs replacement about once a year. 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.

The ProODO Offers:

- **Expanded DO range of 0-500% with a response time of T90 in approximately 25 seconds**

- **Non-consumptive luminescent method eliminates stirring**

- **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- through 30-meter cables**

- **Pro Comm II allows USB connectivity for use with Data Manager software and powers the instrument**

- **Stores 5000 data sets (sensor data, date, time, site and user defined information)**

- **Multiple languages include English, Spanish, French, Italian, Norwegian, Portuguese, German, Japanese and Chinese**

- **3-year instrument warranty; 2-year cable and probe warranty**

YSI Optical BOD Probe

ProOBOD® –
Use in the lab with the ProODO®

- **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 down-time**

- **Probe body tapered to fit into a standard 300 mL BOD bottle; international version also available**

- **Extremely quiet operation**

- **No warm-up time required**

- **Self-stirring to provide representative sample and improve response times**

- **Guarded sensor cap protects the sensor**

ProODO with OBOD probe used with the convenient Lab Dock.

Tougher

The ProODO is the best handheld optical dissolved oxygen instrument on the market. Its combination of versatility, field-worthy durability, and data management are second to none. YSI employees have verified the ProODO's rugged design with a waterproof rating, and rigorous drop, cable flex, and strength tests. You'll receive extreme confidence with every purchase. The feature set in this instrument is so extensive, we encourage you to visit ysi.com/proODO or contact us to learn more.

- **Easy-to-install cable weights; can be daisy-chained for additional weight**
- **Rubber over molded IP-67 waterproof case (even without battery cover)**
- **Rugged cables, sensors, and military-spec connectors**
- **Drop-tested 1 meter at all angles**
- **Scratch-resistant lens; viewable with polarized glasses**
- **Instrument floats**
- **Weighted, user-replaceable cable lengths**
- **Military Spec, waterproof connectors with simple quarter-turn locking**

With ODO technology, oxygen is constantly moving through the diffusion layer, affecting the luminescence of the sensing layer.

The YSI MS (military spec), waterproof, bayonet-style keyed connectors are far superior to plastic connectors.

This ProODO was submerged in freezing water during a lake study. This is confidence in YSI's ruggedness.

This connector had no problems after a 1/2 mile trip down a gravel road. In fact, the meter had no problems either.

Smarter

The ProODO utilizes "smart" sensor technology which stores calibration data within the sensor. This allows probes to be placed on any ProODO instrument without re-calibration.

The instrument also provides multiple languages, detailed GLP data including sensor diagnostics, on-screen Help to eliminate the need for manuals, security passwords, and much more.

The new laboratory BOD probe, ProOBOD, connects easily to the instrument to provide a unique optical BOD in a very compact footprint. The OBOD has a super-quiet stirrer to improve response times and provide a representative sample.

Cable management kit:
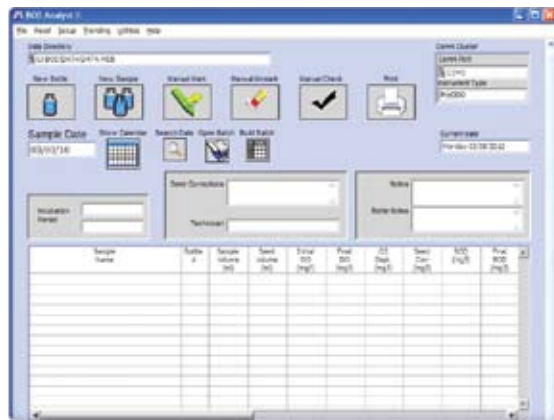
Probe guard protects sensing element.

- **5000 data set memory**
- **Free Data Manager desktop software & ProComm II saddle; USB connection also powers the instrument**
- **Interval or single-event logging**
- **100 folder and site list data structure**
- **Password protection**
- **Detailed GLP data**
- **1-point or 2-point calibration with zero cal**
- **User-adjustable auto-stable with prompts**
- **User-upgradeable software via waterproof USB port**
- **Search function filters user-defined data information**
- **Cable management kit included on cables from 4- to 30-meters**

Software

FREE Data Manager Software

- **Easy-to-use software to manage all your data studies**
- **View, print and export graphical and tabular data**
- **View and print GLP data**
- **Quickly configure just one or multiple instruments**
- **Conduct real-time studies**

BOD Analyst Pro software automates BOD testing.

BOD Analyst Pro® Software

Automatically calculate BOD/CBOD values by directly connecting to the ProODO instrument. Set up samples, groups and more regardless of the seeding method or number of dilutions to instantly build batches. Report BOD data accurately and efficiently.

ProODO System Specifications (instrument with cable and probe)

Dissolved Oxygen (% saturation)	**Sensor Type**	Optical (dynamic luminescence quenching lifetime detection)
	Range	0 to 500% air saturation
	Accuracy	0 to 200% air saturation ± 1% of the reading or ± 1% air saturation, whichever is greater; 200 to 500% air saturation ± 10% of the reading
	Resolution	0.1% air saturation
Dissolved Oxygen (mg/L)	**Sensor Type**	Optical (dynamic luminescence quenching lifetime detection)
	Range	0 to 50 mg/L
	Accuracy	0 to 20 mg/L ± 0.1 mg/L or ± 1% of reading, whichever is greater; 20 to 50 mg/L ± 10% of the reading
	Resolution	0.01 or 0.1 mg/L (auto-scaling)
Temperature (°C, °F, °K)	**Range**	-5 to 70°C
	Accuracy	± 0.2°C
	Resolution	0.1°C
Barometer (mmHg, inHg, mBar, Psi, KPa)	**Range**	375 to 825 mmHg
	Accuracy	± 1.5 mmHg from 0 to 50°C
	Resolution	0.1 mmHg

603069 belt clip

ProODO Additional Specifications

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

* special order cables up to 100-meters in 10-meter increments

603062 cable management kit

603075 soft-sided carrying case with ProODO, cable, and accessories

YSI ProOBOD Probe Specifications

Accuracy	mg/L	0-20 mg/L, ±0.1 mg/L or ±1% reading, whichever greater; 20-50 mg/L, ±10% reading
	% air	0-200%, ±1% reading or ±1%, whichever greater; 200-500%, ±10% reading
	temperature	±0.2° C
Range	mg/L	0-50 mg/L
	% air	0-500% air saturation
	temperature	Ambient (10 to +40° C); Compensation (-5 to +50° C)
Resolution	mg/L	0.01
	% air	0.1%
	temperature	0.1° C
Warranty	2-years; 1-year sensor cap	
Cable Length	3-meters (6 feet)	
Power	External 110-230 VAC power supply with DC input to sensor	
Sensor Type	Optical; dynamic luminescence quenching lifetime detection	
Typical Response Time	95% in 22 seconds with stirring; 95% in 40 seconds without stirring	
Certifications	RoHS, CE, WEEE, IP-65, Assembled in USA	

ProODO Ordering Information (order items separately)*

626281	ProODO handheld instrument
626320	Replacement sensing element (included with initial probe purchase)
626250-1	1-m probe/cable for DO/temp
626250-4	4-m probe/cable for DO/temp (includes cable management kit)
626250-10	10-m probe/cable for DO/temp (includes cable management kit)
626250-20	20-m probe/cable for DO/temp (includes cable management kit)
626250-30	30-m probe/cable for DO/temp (includes cable management kit)
626250-40	40-m probe/cable for DO/temp
626250-50	50-m probe/cable for DO/temp
626250-60	60-m probe/cable for DO/temp
626250-100	100-m probe/cable for DO/temp
626400	ProOBOD BOD probe; U.S./Japanese version with power supply
626401	ProOBOD BOD probe; International version with power supply

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

Accessories Ordering Information (visit ysi.com/accessories)

603075	Soft-sided carrying case
603074	Hard-sided carrying case
603069	Belt clip to attach instrument to belt
063517	Ultra clamp (attach to instrument to secure it to a desk, boat, etc)
063507	Small tripod (attach to instrument to sit on any flat surface)
603062	Cable management kit (included with 4- through 30-m cables)
605978	Cable weight, 4.9 oz, attach to stainless steel probe guard
626444	Laboratory Dock, holds instrument, BOD bottle and Pro Comm II communications saddle

Ordering Guide for ProODO Kits

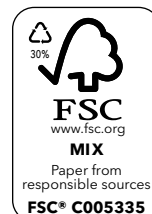|	Description	Included in Kit
603192	ODO, 4-m	ProODO meter, 4-meter field cable with optical DO probe, soft-sided carrying case (603162)
603193	ODO, 10-m	ProODO meter, 10-meter field cable with optical DO probe, soft-sided carrying case (603162)
603194	ODO Lab/Field, 4-m, US	ProODO meter, ProOBOD optical BOD probe, 4-meter field cable with optical DO probe, Lab Dock, US power supply (626600) and ProComm II power (605209), soft-sided carrying case (603162)
603199	ODO Lab/Field, 4-m, INT	ProODO meter, ProOBOD optical BOD probe, 4-meter field cable with optical DO probe, Lab Dock, International power supply (626601) and ProComm II power (605210), soft-sided carrying case (603162)
603195	OBOD Kit, US	ProODO meter, ProOBOD optical BOD probe, Lab Dock, US power supply (626600) and ProComm II power (605209)
603196	OBOD Kit, INT	ProODO meter, ProOBOD optical BOD probe, Lab Dock, International power supply (626601) and ProComm II power (605210)
603197	OBOD Kit, US Pro	ProODO meter, ProOBOD optical BOD probe, Lab Dock, US power supply (626600) and ProComm II power (605209), BOD Analyst Pro desktop software for BOD calculations
603198	OBOD Kit, INT Pro	ProODO meter, ProOBOD optical BOD probe, Lab Dock, International power supply (626601) and ProComm II power (605210), BOD Analyst Pro desktop software for BOD calculations

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Scan this QR Code with your smart phone or tablet to watch a video of the ProODO and ProOBOD.

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