

ProDO®

Handheld Optical Dissolved Oxygen Meter

Specifications



The Best in Dissolved Oxygen just got **Optical.**



ProODO

Digital Optical Dissolved Oxygen Meter

YSI ODO® technology reduces the time required calibrating and maintaining 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.

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 and German. Asian language support in the future.

**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 reduces 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





Tougher

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

In the Field

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 employee owners 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.

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



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



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



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



Smarter Optical DO

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 & 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

Now Even Smarter in the Lab

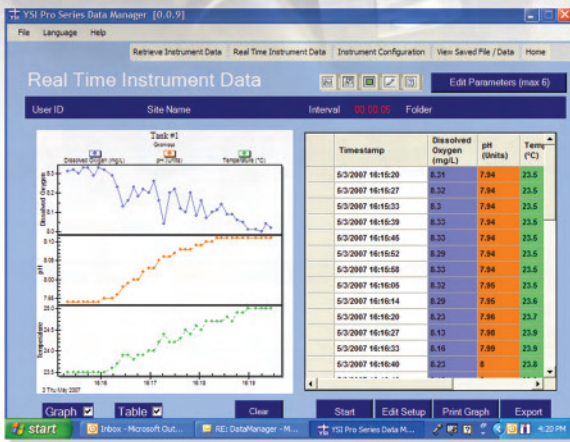
The ProODO utilizes "smart" sensor technology which stores calibration data within the sensor. This allows probes to be placed on any ProODO instrument without re-calibration.

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, can easily be connected to the instrument to provide a unique optical BOD in a very compact footprint. The OBOD has a super, quite stirrer to improve response times and provide a representative sample.

Ask us about
BOD Analyst Pro software

The new ProOBOD
probe makes lab
BODs even easier -
and more accurate



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



Specifications

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, $\pm 1\%$ of the reading or $\pm 1\%$ air saturation, whichever is greater; 200 to 500% air saturation, $\pm 15\%$ 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 $\pm 1\%$ of reading, whichever is greater; 20 to 50 mg/L, $\pm 15\%$ of the reading |
| | Resolution | 0.01 or 0.1 mg/L (auto-scaling) |
| Temperature (°C, °F, °K) | Range | -5 to 70°C |
| | Accuracy | $\pm 0.2^\circ\text{C}$ |
| | 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 |

ProODO Additional Specifications

| | |
|----------------------------------|---|
| Storage Temperature | -20 to 70°C |
| Size | 8.3 cm width x 21.6 cm length x 2.3 cm depth (3.25 in x 8.5 in x 2.25 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; 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 |
| 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; Asian 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 |

YSI ProOBOD Probe Specifications

| | | |
|------------------------------|---|---|
| Accuracy | mg/L | 0-20 mg/L, ± 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 | $\pm 0.2^\circ\text{C}$ |
| 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 | |



603069 belt clip



603062 cable management kit



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



YSI.com/ProODO
YSI.com/ProOBOD



Ordering Information

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 |



visit ysi.com/weknowDO

View Dissolved Oxygen technology webinars, videos, selection guides, product spec sheets and more at our dissolved oxygen resource page.

Quick Links

ysi.com/proODO
ysi.com/proOBOD
ysi.com/smarter
ysi.com/tougher
ysi.com/versatile
ysi.com/weknowDO



visit youtube.com/ysiinc

View product demos, field studies, and instrument installations.

Follow YSI on:



www.facebook.com/myYSI



www.twitter.com/ysiinc



Printed on environmentally friendly paper with soy inks.

| ECO CALCULATIONS REPORT | | | | |
|--|------------------|----------------------------|-------------|-------------|
| YSI, Inc. saved the following resources by using U2:YG made with 30% post-consumer recovered fiber. | | | | |
| trees | energy | greenhouse gas | waste water | solid waste |
| 1 | 0.6 million BTUs | 313.59 lbs CO ₂ | 335 gal | 55 lbs |
| U2:YG is FSC-certified, contains 30% post consumer recovered fiber, and is manufactured with electricity in the form of renewable energy. U2:YG is manufactured by Appleton Coated www.appletoncoated.com | | | | |

+1 937 767 7241
800 897 4151 (US)

www.YSI.com

YSI Environmental

Fax +1 937 767 9353
environmental@ysi.com

YSI Integrated Systems & Services

+1 508 748 0366
systems@ysi.com

SonTek/YSI

+1 858 546 8327
inquiry@SonTek.com

YSI Gulf Coast

+1 225 753 2650
environmental@ysi.com

AMJ Environmental

+1 727 565 2201
info@amjenviro.com

YSI Hydrodata

European Support Centre
+44 1462 673581
europe@ysi.com
ireland@ysi.com

YSI Middle East (Abu Dhabi)

+971 2 56 31 316
samer@nanotech.co.jp

YSI (Hong Kong) Limited

+852 2891 8154
hongkong@ysi.com

YSI China

+86 10 5203 9675
beijing@ysi-china.com

YSI/Nanotech (Japan)

+81 44 222 0009
nanotech@ysi.com

YSI South Asia

+91 989 122 0639
sham@ysi.com

YSI Australia

+61 7 390 17223
acorbett@ysi.com

ISO 9001

ISO 14001

(Yellow Springs facility)

Pure Data for a Healthy Planet,
Who's Minding the Planet, ODO,
ProODO, OBOD and ProOBOD
are registered trademarks of
YSI Incorporated.

Specifications are subject to change.
Please visit www.YSI.com to verify all specs.



©2010 YSI Incorporated
Printed on recycled paper in USA
W3-04 0510