xylem
Environmental Solutions

EXO™ Sondes

BEST-IN-CLASS PLATFORM FOR THE HIGHEST-QUALITY DATA

SPECIFICATIONS
XA00243-01

YSI
a xylem brand

EXO™

It's your world. **Protect it.**

YSI's **EXO Sonde Platform** is the pinnacle of multiparameter water quality monitoring instrumentation. EXO offers endless customization with a range of sonde models, interchangeable smart sensors, industry-leading anti-fouling, and multiple integration and communication options.

Selection guide

	EXO1	EXO1^S	EXO1^S with depth	EXO2	EXO2^S	EXO3	EXO3^S
Sensor Ports	4	4	4	7 (6 Sensors + 1 Central Wiper)	7 (6 Sensors + 1 Central Wiper)	5 (4 Sensors + 1 Central Wiper)	5 (4 Sensors + 1 Central Wiper)
Battery Power	2 D-cell batteries	External power required	External power required	4 D-cell batteries	External power required	2 D-cell batteries	External power required
Battery Life	90 days*	–	–	90 days*	–	60 days*	–
External Power	9 - 16 V	9 - 16 V	9 - 16 V	9 - 16 V	9 - 16 V	9 - 16 V	9 - 16 V
Central Wiper	–	–	–	✓	✓	✓	✓
Auxiliary Port	–	–	–	✓	✓	–	–
Diameter	4.70 cm (1.85 in)	4.70 cm (1.85 in)	4.70 cm (1.85 in)	7.62 cm (3.00 in)	7.62 cm (3.00 in)	7.62 cm (3.00 in)	7.62 cm (3.00 in)
Length with guard	64.53 cm (25.40 in)	44.77 cm (17.63 in)	46.41 cm (18.27 in)	70.52 cm (27.76 in)	42.87 cm (16.88 in)	58.61 cm (23.07 in)	42.87 cm (16.88 in)
Weight without sensor payload	1.42 kg (3.13 lbs)	0.48 kg (1.06 lbs)	0.56 kg (1.24 lbs)	3.60 kg (7.94 lbs)	1.06 kg (2.34 lbs)	2.00 kg (4.41 lbs)	1.06 kg (2.34 lbs)

*Based on a full sensor payload and a 15-minute logging interval; actual battery life will depend on the number of sensors and measurement frequency.

EXO Sonde Specifications*

Memory	>1,000,000 logged readings, 512 MB total memory
Software	Kor Software for Windows; Kor Mobile for Android
Communications	
Computer Interface	YSIP via USB Signal Output Adapter (SOA) and Bluetooth
Output Options	All: RS-232 & SDI-12 via DCP-SOA Modbus & RS-485 via Modbus-SOA EXO3 & EXO3^S: SDI-12 Native Output
Temperature	
Operating	-5 to 50 °C (23 to 122 °F)
Storage	-20 to 80 °C (-4 to 176 °F)
Depth Rating	0 to 250 m (0 to 820 ft)
Sampling Rate	Up to 4 Hz (0.25 seconds)
Sensor Options	Conductivity/Temperature, Depth, Dissolved Oxygen, fDOM, ISE Ammonium, ISE Chloride, ISE Nitrate, pH, pH/ORP, Rhodamine, Total Algae (PC or PE), Turbidity, UV Nitrate
Warranty	3 years

*Specifications indicate typical performance and are subject to change.

Low power consumption, unmatched sensor payload, and an industry-leading warranty make EXO the ultimate choice for long-term water quality monitoring.

Monitoring made **mobile**

Stay connected with EXO GO and the EXO Handheld.

	EXO GO Use Bluetooth to connect your EXO to any Android or Windows device.	**EXO Handheld** A rugged, dedicated interface for EXO Sondes.
GPS	Accuracy: 2.5 m CEP (dependent on site conditions)	Accuracy: 2.5 m CEP (dependent on site conditions)
Barometer	Range: 375 to 825 mmHg Accuracy: ± 1.5 mmHg Resolution: 0.1 mmHg	Range: 375 to 825 mmHg Accuracy: ± 1.5 mmHg Resolution: 0.1 mmHg
Battery	Operating Time: >15 hours Charging Time: 9 hours	Operating Time: >15 hours Charging Time: 9 hours
USB Connectivity	✓	✓
Bluetooth Connectivity	✓	–
IP-67 Rating	✓	✓
Display	–	✓
Onboard Memory	–	✓
Operating Temperature	-5 to 50 °C (23-122 °F)	-5 to 50 °C (23-122 °F)
Storage Temperature	0 to 45 °C (32-113 °F)	0 to 45 °C (32-113 °F)
Dimensions	17.4 x 5.2 x 3.5 cm (6.9 x 2.0 x 1.4 in)	21.6 x 8.3 x 5.6 cm (8.5 x 3.3 x 2.2 in)
Weight	240 g (0.53 lbs)	567 g (1.25 lbs)
Warranty	1 year	3 year handheld 1 year battery

Where will you go with **EXO**?

Protecting the world means monitoring in remote locations and collecting high-quality data even when you can't be there. **EXO Sondes** allow for 24/7/365 monitoring for the most comprehensive data.

Continuous monitoring

Discrete sampling

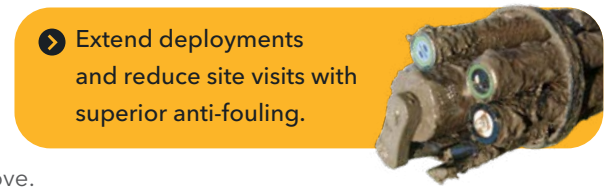
Systems integration

EXO Sensor Specifications

Sensor	Range	Resolution[1]	Accuracy[2]
Conductivity (Non-Wiped)	0 to 200,000 µS/cm	0.1 to 10 µS/cm	**0 to 100,000:** ±0.5% of reading or 1 µS/cm, whichever is greater **100,000 to 200,000:** ±1.0% of reading
Temperature	-5 to 50 °C	0.001 °C	**-5 to 35:** ±0.01 °C **35 to 50:** ±0.05 °C
Conductivity (Wiped)	0 to 100,000 µS/cm	0.1 to 10 µS/cm	±1.0% of reading or 2 µS/cm, whichever is greater
Temperature	-5 to 50 °C	0.001 °C	±0.2 °C
Depth or Vented Level	0 to 10, 100 or 250 m	0.001 m	±0.04% Full Scale
	0 to 10 m	0.001 m	±0.03% Full Scale
Dissolved Oxygen	0 to 500% air saturation	0.1% air saturation	**0 to 200:** ±1% of reading or 1% saturation, whichever is greater **200 to 500:** ±5% of reading
	0 to 50 mg/L	0.01 mg/L	**0 to 20:** ±0.1 mg/L or 1% of reading, whichever is greater **20 to 50:** ±5% of reading
fDOM	0 to 300 ppb QSU	0.01 ppb QSU	Linearity: $r^2 \geq 0.999$ for 0 to 300 for serial dilution of 300 ppb Quinine Sulfate Solution Minimum Detection Limit: 0.1 ppb Quinine Sulfate Equivalents
ISE Ammonium	0 to 200 mg/L-N (NH_4^+)	0.01 mg/L	±10% of reading or ±2 mg/L-N, whichever is greater
ISE Chloride	0 to 1000 mg/L-Cl (Cl^-)	0.01 mg/L	±15% of reading or ±5 mg/L-Cl, whichever is greater
ISE Nitrate	0 to 200 mg/L-N (NO_3^-)	0.01 mg/L	±10% of reading or ±2 mg/L-N, whichever is greater
pH	0 to 14 pH units	0.01 pH units	±0.1 within ±10 °C of calibration temperature ±0.2 for entire temperature range
ORP	-999 to 999 mV	0.1 mV	±20 mV in Redox standard solution
Rhodamine	0 to 100 RFU	0.01 RFU	Linearity: $r^2 > 0.999$ or Rhodamine WT across full range ±5% or 0.1 µg/L, whichever is greater
	0 to 1,000 µg/L	0.01 µg/L	
TAL-Chlorophyll	0 to 100 RFU or 0 to 400 µg/L chl	0.01 RFU or 0.01 µg/L of pigment	Linearity: $r^2 \geq 0.999$ for Rhodamine WT across full range
TAL-Phycocyanin	0 to 100 RFU or 0 to 100 µg/L PC		
TAL-Phycoerythrin	0 to 100 RFU or 0 to 280 µg/L PE		
Turbidity	0 to 4000 FNU, NTU	**0 to 999:** 0.01 FNU **1000 to 4000:** 0.1 FNU	**0 to 999:** 0.3 FNU or ±2% of reading, whichever is greater **1000 to 4000:** ±5% of reading
UV Nitrate (NitraLED)	0 to 30 mg/L-N (NO_3^-)	0.01 mg/L-N	**0 to 10:** ±0.1 mg/L-N or 5% of reading, whichever is greater (within 2 °C) ±0.4 mg/L-N or 5% of reading, whichever is greater (full range) **10 to 30:** ±7% of reading

[1] Range dependent.

[2] Specifications indicate typical performance and are subject to change.



Calculated parameters

The following parameters are calculated from one or more sensors listed above.

- Absolute Pressure
- Ammonia
- Gauge Pressure
- Local DO %CB
- Local DO %RTB
- nLF Conductivity
- Resistivity
- Salinity
- Specific Conductivity
- Total Algae cells/mL
- Total Dissolved Solids
- Total Suspended Solids
- Vertical Position
- Water Density

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Who's Minding the Planet?®

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