

# **EXO Sondes**

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





# **EXO** YSI.com/EXO

# When only the best will do.

EXO is the premium water quality monitoring platform in the world.

# The unmatched benefits of **EXO** include:



#### **Highest Data Quality**

Onboard monitoring systems verify sensor operation



# Industry-leading Anti-fouling

Best-in-class anti-fouling wiper technology



#### Smart QC™

SmartQC checks for errors and ensures proper calibrations



#### **Titanium Components**

The toughest grade parts guarantee operation well into the future



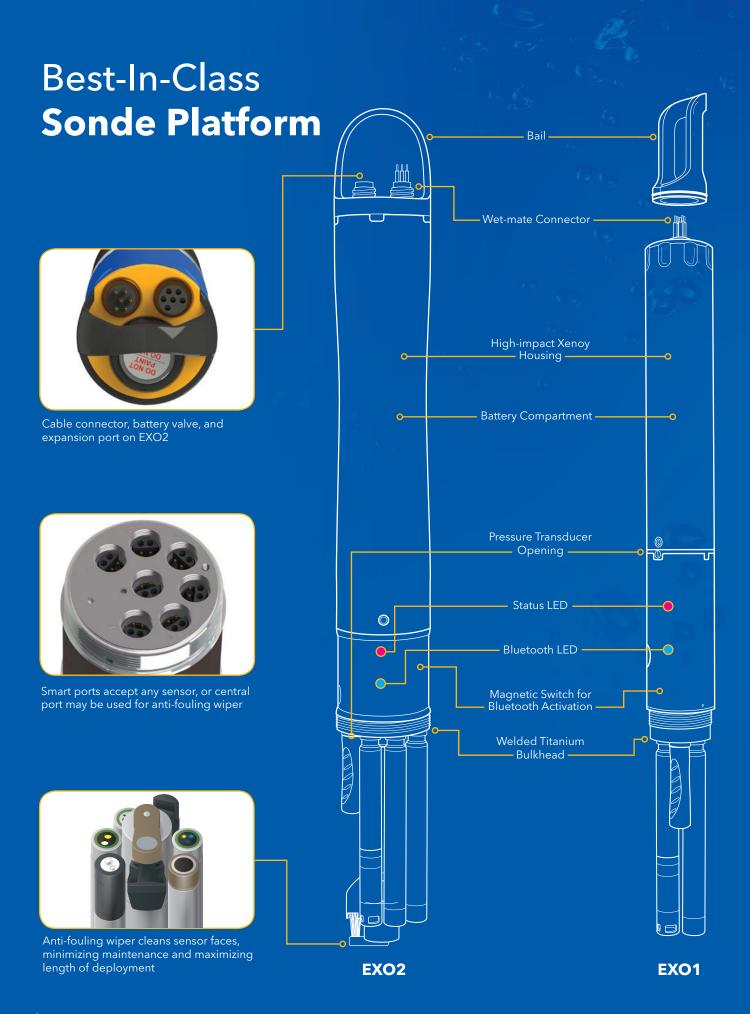
#### **Digital Smart Sensors**

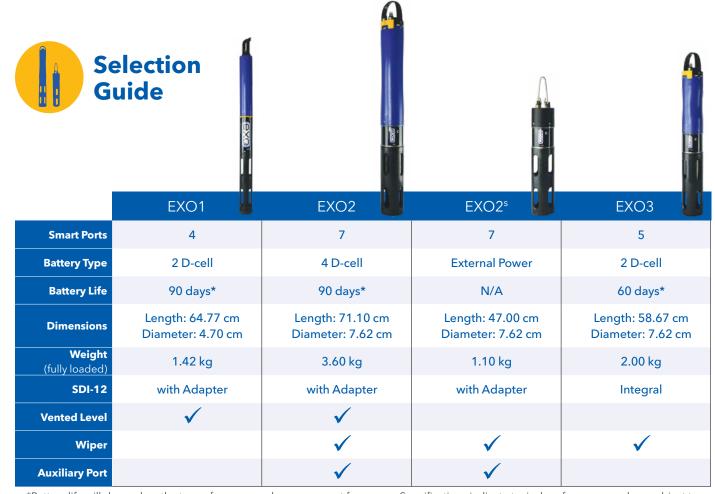
Auto-recognition of any sensor in any port





A **Smart**, **Field-Ready**Water Monitoring Platform





<sup>\*</sup>Battery life will depend on the type of sensors and measurement frequency. Specifications indicate typical performance and are subject to change. Please check YSI.com/EXO for up-to-date information.

### **Sonde Specifications**

Sondes		
Sondes		
Operating Temperature	-5 to 50°C	
Storage Temperature	-20 to 80°C (may differ for sensors)	
Depth Rating	0 to 250 m	
Communications	Computer Interface: Bluetooth wireless technology, RS-485, USB Output Options: USB with signal output adapter (SOA); RS-232 & SDI-12 with DCP-SOA; Modbus & RS-485 with Modbus-SOA	
Sample Rate	Up to 4 Hz	
Data Memory	512 MB total memory; >1,000,000 logged readings	
Warranty	2 years	

EXO Sondes are perfect for long-term deployments. Daisy-chain multiple sondes for measurements at vaious depths.









#### **EXO GO**

**EXO GO** uses Bluetooth to connect any Windows OS device to a submerged **EXO Sonde**.

Pair with a tablet or laptop and leverage the full power of **KorEXO Software** for your monitoring applications.

Choose **EXO GO** for the flexibility of monitoring with any Windows OS device and access to the full features of KorEXO Software. EXO GO cuts out the middleman and delivers data directly to your PC!



#### **KorEXO Software**

Bring the full power of KorEXO to your site with any Windows OS portable device





#### **Bluetooth Communication**

Keep your sonde in the water while you view data in real time, download files, or adjust deployment settings on the GO

	EXO Haridheid
✓	✓
$\checkmark$	
$\checkmark$	$\checkmark$
	$\checkmark$
	✓
-5 to 50°C	0 to 50°C
0 to 45°C	0 to 45°C
17.4 x 5.2 x 3.5 cm	8.3 x 21.6 x 5.6 cm
240 g	567 g
1 year	3 year meter, 1 year battery
	✓ ✓ ✓ -5 to 50°C 0 to 45°C 17.4 x 5.2 x 3.5 cm 240 g

#### Common Features

GPS	Accuracy: 2.5 m CEP (dependent on site conditions)
Barometer	Range: 375 to 825 mmHg Accuracy: +/-1.5 mmHg Resolution 0.1 mmHg
Battery	Operating Time: >15 hours Charging Time: 9 hours

Choose the **EXO Handheld** for an easy-to-use, purposebuilt interface with a tactile keypad and full color display. Keep it simple and collect data in the most challenging environments with the EXO Handheld!



#### **Simplified Interface**

Lower the learning curve of collecting high-quality data with a simplified user interface and integrated help screens

**EXO Handheld** 

The **EXO Handheld** offers

a dedicated, streamlined

interface to **EXO Sondes**.

Convenient monitoring is

and simple operation.

achieved with a backlit color display, ergonomic design,



#### **Transfer Data**

Quickly transfer collected data sets and calibration records to a USB flash drive with the push of a button



**GPS Tagging** 

Georeference data sets using GPS



Lithium-Ion Battery

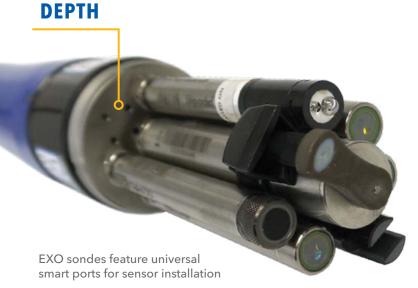
Collect more samples with the longlasting, rechargeable battery Common Feature

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## **Smart Sensor** Suite

A dynamic range of sensors for multiparameter applications





# CONDUCTIVITY / TEMPERATURE (NON-WIPED) TOTAL ALGAE-PE AMMONIUM ISE CHLORIDE ISE NITRATE ISE PH RHODAMINE

## **Sensor Specifications**

Sensor	Range	Resolution <sup>1</sup>	Accuracy <sup>2</sup>	
Conductivity (Non-Wiped)	0 to 200 mS/cm	0.0001 to 0.01 mS/cm	±0.5% of reading or 0.001 mS/cm, w.i.g. (0-100 mS/cm) ±1% of reading (100-200 mS/cm)	
Temperature	-5 to 50°C	0.001°C	±0.01°C (-5 to 35°C) ±0.05°C (35 to 50°C)	
Conductivity (Wiped)	0 to 100 mS/cm	0.0001 to 0.01 mS/cm	±1% of reading or 2 μS/cm, w.i.g.	
Temperature	-5 to 50°C	0.001°C	±0.2°C	
Depth	0 to 10, 100 or 250 m	0.001 m	±0.04% Full Scale	
Vepted Level	0 to 10 m	0.001 m	±0.03% Full Scale	
	0 to 500% air sat.	0.1% air sat.	±1% of reading or 1% sat., w.i.g., (0 to 200%) ±5% of reading (200 to 500%)	
Dissolved Oxygen	0 to 50 mg/L	0.01 mg/L	±1% of reading or 0.1 mg/L, w.i.g., (0 to 20 mg/L) ±5% of reading (20 to 50 mg/L)	
fDOM	0 to 300 ppb QSE	0.01 ppb QSE	Linearity: $r^2 \ge 0.999$ for 0 to 300 ppb QSE, MDL of 0.016 ppb QSE	
рН	0-14 pH units	0.01 pH unit	±0.1 within ±10°C of cal temp ±0.2 for all other temps	
ORP	-999 to 999 mV	0.1 mV	±20 mV	
Rhodamine	0 to 100 RFU or 0 to 1,000 µg/L	0.01 RFU or 0.01 μg/L	$\pm$ 5% or 0.1 μg/L w.i.g, Linearity: $r_2 > 0.999$	
TAL-Chlorophyll	0 to 100 RFU or 0 to 400 μg/L chl			
TAL-Phycocyanin	0 to 100 RFU or 0 to 100 μg/L PC	0.01 RFU or 0.01 µg/L of pigment	Linearity: $r^2 \ge 0.999$ for Rhodamine WT across full range	
TAL-Phycoerythrin	0 to 100 RFU or 0 to 280 μg/L PE			
Turbidity	0 to 4000 FNU	0.01 FNU to 0.1 FNU	0.3 FNU or ±3% of reading, (0 to 999 FNU) ±5% of reading (1000 to 4000 FNU)	

<sup>&</sup>lt;sup>1</sup>Range dependen

<sup>&</sup>lt;sup>2</sup>Specifications indicate typical performance and are subject to change. Please check YSI.com/EXO for up-to-date information.



#### **Calculated Parameters**

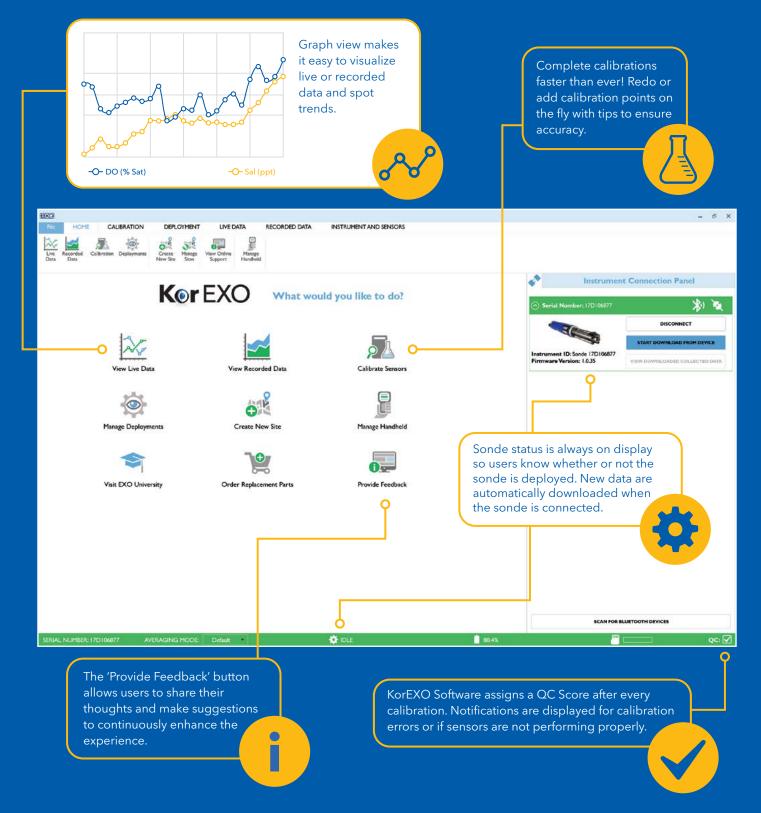
The following parameters are calculated from one or more sensors listed above. More information about the methods and calculations may be found in the EXO User Manual.

- Absolute Pressure
- Ammonia
- DO% Local
- DO% LocalB
- Gauge Pressure
- nLF Conductivity
- Resistivity

- Salinity
- Specific Conductivity
- Total Algae cells/mL
- Total Dissolved Solids
- Total Suspended Solids
- Vertical Position
- Water Density

## **KorEXO** Software

KorEXO is an accessible, feature-rich software platform for managing EXO instrumentation and water quality data. The software allows you to calibrate sensors, setup long-term deployments, and ensure equipment is operating at peak performance. Designed to run on Windows OS computers and tablets, the interface is optimized for touchscreens and streamlined for operation in the field, lab, or office.



# **Support and Protection** for Your Peace of Mind

# **Protect your investment with the EXO Factory Service Plan\***

With an **EXO Factory Service Plan**, you can minimize down-time and unexpected maintenance costs by keeping your equipment in top working order.

#### What does the Service Plan include?

Plans cover standard replacement parts, firmware updates, seal restoration, cleaning, comprehensive evaluation, testing, and calibration of all sensors.

#### What equipment is covered?

Each plan covers a single EXO sonde, field cable, handheld, and sensors purchased with the sonde.

#### How long does coverage last?

Plans are available for coverage up to 3 years from the time the EXO Sonde is purchased.

\*Currently available in North America. Check with your regional technical support for service options.

## **Industry-Leading Technical Support**

Our expert **Technical Support Team** is available to provide assistance and answer any questions that may come up in the field or lab.

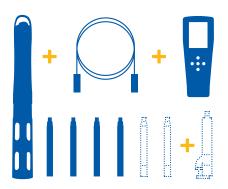








Factory Service Center located in Yellow Springs, Ohio





Technicians are available for in-house or on-site training events



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## Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.



"I'm very proud of the great work our customers do using our best-in-class sonde platform."

Dr. Stephanie A. Smith

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**EXO Product Manager** 















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