xylem
Let's Solve Water

ProDSS

MULTIPARAMETER WATER QUALITY FIELD INSTRUMENT

a **xylem** brand

ProDSS

D·I·G·I·T·A·L Sampling System

YSI.com/ProDSS

Customize your **Professional Digital Sampling System** to meet the demands of your water quality monitoring application.

RUGGED

SMART

RELIABLE
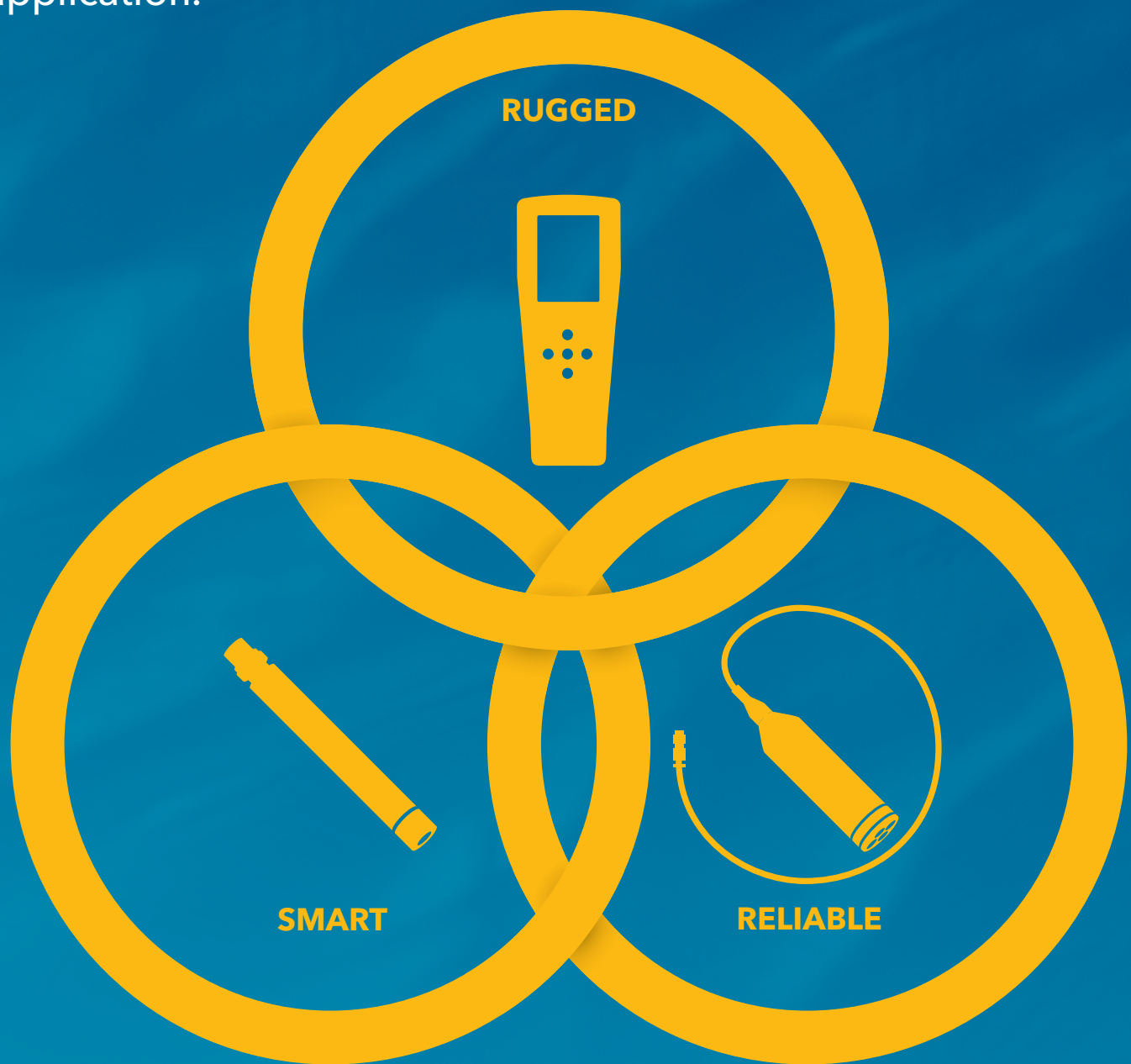
When the Environment Demands It.

With **21 parameter options** and several cable configurations to choose from, the **ProDSS** is ideal for nearly any application - surface water, groundwater, coastal waters, aquaculture, and wastewater (field or lab).

ProDSS
Features

On-The-Go Micro USB connector

Optional built-in GPS

Optional depth sensor

Long-life, rechargeable lithium-ion battery

Color screen with graphing

Stores over 100,000 data sets and 400 fully-traceable calibration records

4-Port Smart Sensor bulkhead

Backlit keypad

Titanium Smart Sensors

IP-67-rated casing

MS (military-spec) connectors - rugged, waterproof, keyed, bayonet style lock

Integral field cable with user-selectable lengths up to 100 m

Sensor Guard

Rugged **Handheld**

The ProDSS Handheld can withstand the harshest field conditions and handling, with maximum versatility and functionality.

- Easy-to-read color and backlit display can be used in any lighting condition
- Scratch-resistant screen is viewable with polarized glasses
- Long-life rechargeable lithium-ion battery ensures reliability in the field and minimizes waste
- Waterproof (IP-67) rubber over-molded casing
- Simple interface and a dedicated "Help" Button
- Ergonomic design for optimal handling and portability
- Optional GPS for geo-referencing data
- 3-year warranty

"I like the LCD display because of its **ease of use** in low and high light areas... the **increased memory size and speed** are also very nice for logging data."

ProDSS User
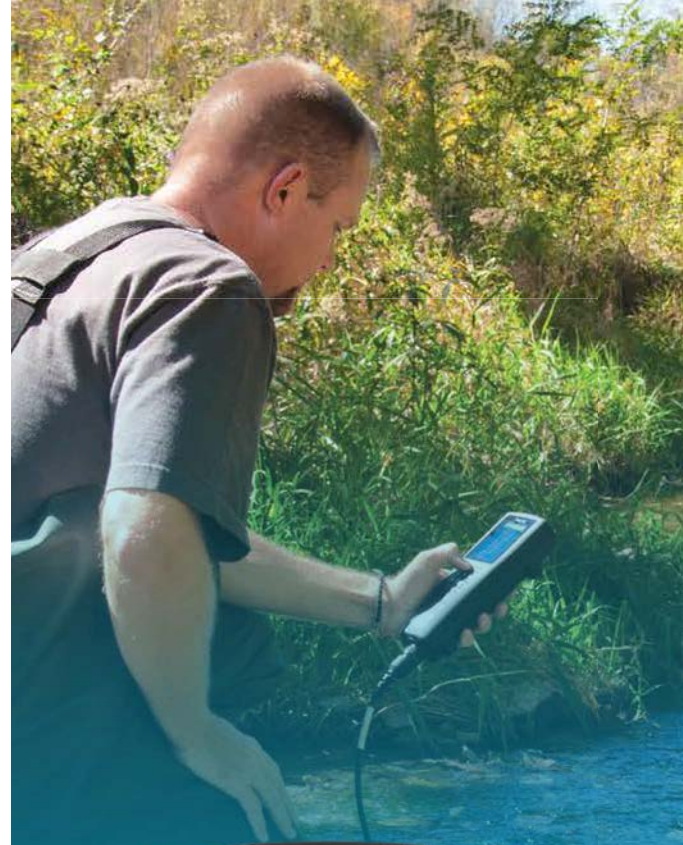
Smart Sensors

The 4-Port ProDSS cable uses digital Smart Sensors for fast, easy setup and storage, and highest quality data.

- Smart Sensors: any sensor in any port
- Traceable calibrations stored in sensor — recalibration not required if moved to another port or another instrument
- Sensors are auto-recognized upon installation
- Replaceable sensor modules and ODO cap reduces maintenance and cost of operation
- Highly-ruggedized, welded titanium sensor body
- 2-year warranty

Water Quality Parameters:

|	
Dissolved Oxygen (Optical)	Depth
Turbidity	GPS Coordinates
pH	Ammonium
ORP/Redox	Ammonia
Conductivity	Chloride
Specific Conductance	Nitrate
Salinity	Temperature
Total Dissolved Solids (TDS)	Barometric Pressure
Resistivity	Total Algae
Seawater Density	Chlorophyll
Total Suspended Solids (TSS)	

Reliable
Cables

Not just a power cord! ProDSS cables minimize electrical noise and signal degradation over any cable length.

- Single-line design for easy handling in the field
- MS (Military Spec) locking connector for secure connection during sampling
- Cable lengths up to 100 meters
- Sensor guard weights for vertical profiling and stability in strong currents
- 2-year warranty
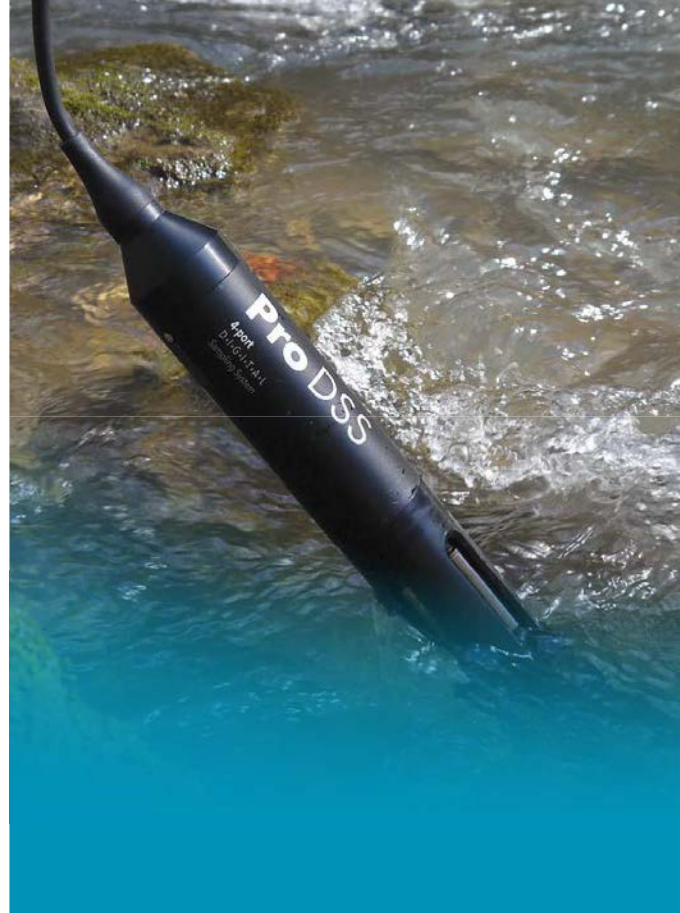
Multiparameter 4-Port Cable
- Universal smart ports
- Optional depth sensor

ODO/CT Probe and Cable Assembly
- Temperature, conductivity, and ODO in one sensor body
- Less than 1-inch diameter
- Rugged ODO sensor cap with 2-year warranty

ProODO Probe and Cable Assembly
- Temperature and ODO in one sensor
- Less than 1-inch diameter

ProOBOD Probe and Cable Assembly
- Tapered probe for BOD bottles
- Quiet, self-stirring
- Guarded sensor cap

Powerful **Data** Management


ProDSS Handheld

- Store over 100,000 data sets, up to 100 sites, and 100 data tags to the Handheld
- Store up to 400 calibration records
- On-The-Go Micro USB lets you retrieve data anytime with a USB stick

KorDSS

- Powerful KorDSS software is included with all systems
- Use to transfer instrument configurations to multiple Handhelds
- Transport data directly from handheld or USB
- Conduct real-time studies
- Enhance data with site images

"This is the **quickest I've ever collected data** and looked at it in a meaningful fashion without spending a lot of time downloading and formatting."

ProDSS User on KorDSS
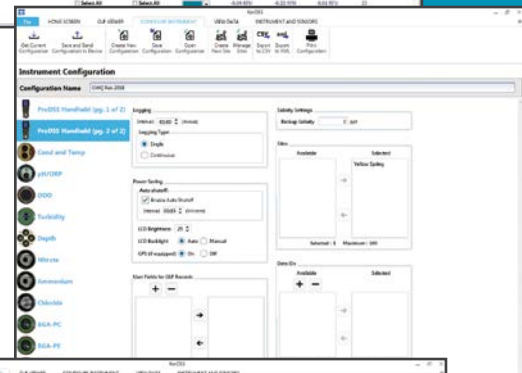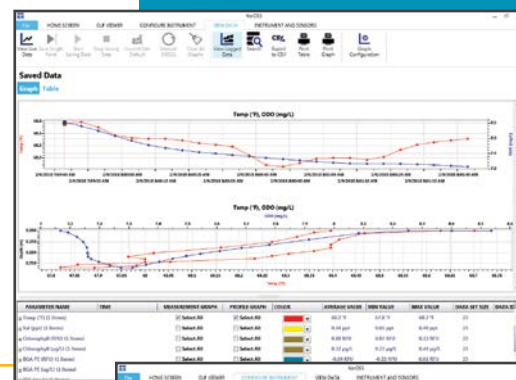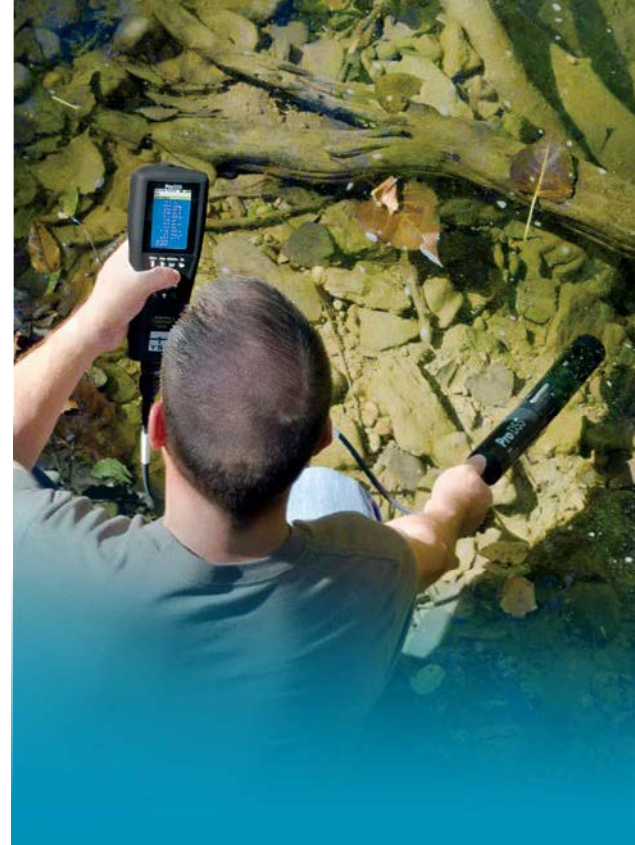
ProDSS General Specifications

Auto Stable	User-defined auto-stable function holds stable readings on display when criteria is met
Buffer Recognition	Auto buffer recognition and temperature compensation for US and NIST buffers
Cable Connector	MS (military spec) waterproof with bayonet lock
Calibration Points	1, 2, or 3 point for pH, Turbidity, Ammonium, Nitrate, and Chloride; 1 or 2 point for DO; 1 point for ORP, Barometer, Conductivity, Specific Conductance, Salinity, and Depth
Certifications	CE; RoHS; IP-67; WEEE; FCC; UN Part III, Section 38.3, Test methods for lithium-ion batteries (Class 9)
Connectivity	Built-in micro USB; Cable for PC connection and cable for connection to USB memory stick are included
Data Management	KorDSS desktop software included; 100 user-defined Data ID tags and 100 Sites with GPS coordinates
Data Memory	>100000 data sets (data, date, time, user-defined info); 100 files
Dimensions	Handheld is 8.3 x 21.6 x 5.6 cm
Display	Color, LCD graphic display; 3.9 x 6.5 cm
GLP Compliance	Yes; 400 detailed GLP records can be stored and are available to view, download and print
GPS	Optional internal GPS; coordinates are stored with measurement data and site lists
Languages	English, Spanish, German, French, Italian, Norwegian, Portuguese, Japanese, Chinese (Simplified & Traditional), Korean, Thai
Logging Modes	Single Point or Continuous
Operating Temperature	0 to 50° C
Password Protection	Calibration menu can be password protected to prevent unauthorized sensor calibration
Battery	Rechargeable lithium-ion battery pack provides ~20 hours with the handheld, 4 port cable and 4 smart sensors; battery recharge time is ~9 hours with the AC power adapter
Storage Temperature	0 to 45° C with battery installed; 0 to 60° C without battery installed
Recalibration Prompt	Provides reminder to recalibrate a ProDSS sensor after user-defined number of days
User ID	Optional user ID for data security
USB Port	Built-in micro USB On-The-Go port for PC connection, recharging/powering the ProDSS and connecting directly to a USB stick
Warranty	3-year; 2-year bulkhead, cable assembly, sensors; and ODO Extended Warranty cap; 1-year pH and pH/ORP sensor modules, ODO sensor caps, and Li-ion battery pack; 6-months ammonium, nitrate, and chloride sensor modules
Waterproof	IP-67; floats
Weight with Batteries (handheld)	567 grams (1.25 lbs)
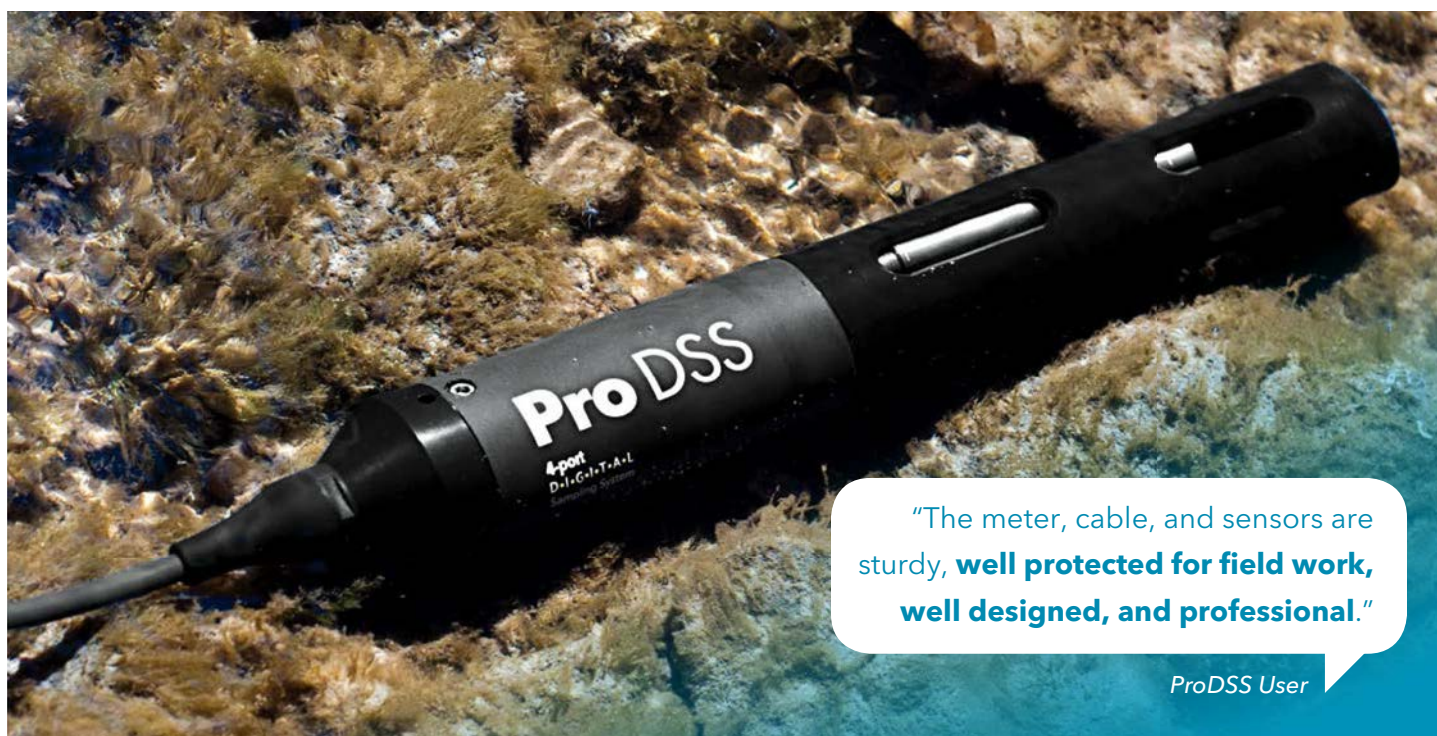
"The meter, cable, and sensors are sturdy, **well protected for field work, well designed, and professional**."

ProDSS User

ProDSS Sensor Specifications

Sensor/Parameter	Range	Resolution	Accuracy
Temperature	-5 to 70 °C (temperature compensation range for DO mg/L measurement: -5 to 50 °C)	0.1 °C or 0.1 °F (user selectable)	±0.2 °C
pH	0 to 14 pH units	0.01 pH units	±0.2 pH units
ORP	-1999 to 1999 mV	0.1 mV	±20 mV
Dissolved Oxygen	0 to 500%, 0 to 50 mg/L	0.01 mg/L and 0.1%, or 0.1 mg/L and 1% (user selectable)	0 to 200%: ±1% of reading or 1% saturation, whichever is greater 200 to 500%: ±8% of reading 0 to 20 mg/L: ±0.1 mg/L or 1% of reading, whichever is greater 20 to 50 mg/L: ±8% of reading
Barometer	375 to 825 mmHg	0.1 mmHg	±1.5 mmHg from 0 to 50 °C
Conductivity	0 to 200 mS/cm	0.001, 0.01 or 0.1 µS/cm (range dependent)	0 - 100 mS/cm: ±0.5% of reading or .001 mS/cm, whichever is greater 100 - 200 mS/cm: ±1.0% of reading
Specific Conductance*	0 to 200 mS/cm	0.001, 0.01, 0.1 mS/cm	0 - 100 mS/cm: ±0.5% of reading or .001 mS/cm, whichever is greater 100 - 200 mS/cm: ±1.0% of reading. User selectable reference temperature (15 to 25 °C; default 25 °C) and compensation coefficient (0 to 4%/°C; default 1.91%)
Salinity*	0 to 70 ppt	0.01 ppt	±1.0% of reading or ±0.1 ppt, whichever is greater
Total Dissolved Solids (TDS)*	0 to 100 g/L	0.001, 0.01, 0.1 g/L	Calculated from specific conductance and a user-selectable TDS multiplier (0.30 to 1.00; default 0.65)
Resistivity*	0 to 2 Mohms	0.001, 0.01, 0.1 ohms	±0.1% Full Scale
Seawater Density*	0.0 to 50.0 sigma, sigma T	0.1 sigma or sigma T	-
Turbidity	0 to 4000 FNU	0.1 FNU	0 to 999 FNU: 0.3 FNU or ±2% of reading, whichever is greater 1000 to 4000 FNU: ±5% of reading
TAL-Chlorophyll	0 to 100 RFU or 0 to 400 µg/L chl	0.01 RFU or 0.01 µg/L	Linearity: $r^2 \geq 0.999$ for Rhodamine WT across full range
TAL-Phycocyanin	0 to 100 RFU or 0 to 400 µg/L PC		
TAL-Phycoerythrin	0 to 100 RFU or 0 to 400 µg/L PE		
Ammonium**	0 to 200 mg/L NH_4-N	0.01 mg/L	±10% of reading or 2 mg/L, whichever is greater
Ammonia*	0 to 200 mg/L NH_3-N	0.01 mg/L	-
Chloride**	0 to 18000 mg/L Cl	0.01 mg/L	±15% of reading or 5 mg/L, whichever is greater
Nitrate**	0 to 200 mg/L NO_3-N	0.01 mg/L	±10% of reading or 2 mg/L, whichever is greater
Depth	0 to 328 feet (0 to 100 m)	0.001 m or 0.01 ft	±0.004 m for 1, 4, and 10 m cables ±0.04 m for cables 20 m and longer

*Derived/calculated parameter
**ISEs for freshwater only; 20-meter maximum depth

Ordering Guide

Step 1: Order Handheld

All instruments include a rechargeable lithium-ion battery (pre-installed), hand strap, USB cable, universal AC charger, data export cable, ProDSS quick start guide, and USB memory stick containing KorDSS software and digital copy of the user manual.

☐ **626870-1**: Handheld with no GPS

☐ **626870-2**: Handheld with GPS

Step 2: Order Cable Assembly

There are two types of cables available for use with the ProDSS - those with integral sensors and those without.

ProDSS 4 Port

☐ **626909**: ProDSS 4 port cable without depth sensor; **1**, **4**, **10**, **20**, **30**, **40**, **50**, **60**, **70**, **80**, **90**, or **100** meter cable.

☐ **626910**: ProDSS 4 port cable with depth sensor; **1**, **4**, or **10** meter cable.

☐ **626911**: ProDSS 4 port cable with depth sensor; **20**, **30**, **40**, **50**, **60**, **70**, **80**, **90**, or **100** meter cable.

ProDSS ODO/CT, ProODO, and ProOBOD

☐ **627150**: ProDSS ODO/CT cable with integral optical DO, conductivity, and temperature sensors; **1**, **4**, **10**, **20**, **30**, **40**, **50**, **60**, **70**, **80**, **90**, or **100** meter cable

☐ **626250**: ProODO cable with integral optical DO and temperature sensors; **1**, **4**, **10**, **20**, **30**, **40**, **50**, **60**, **70**, **80**, **90**, or **100** meter cable

☐ **626400**: ProOBOD BOD probe/cable assembly, lab probe; U.S./Japanese version with power supply.

☐ **626401**: ProOBOD BOD probe/cable assembly, lab probe; International version with power supply.

Step 3: Order ProDSS Smart Sensor(s) for ProDSS 4 Port Cables

A conductivity/temperature sensor must be included for temperature compensation.

☐ **626900**: Optical dissolved oxygen (ODO) with pre-installed sensor cap

☐ **626901**: Turbidity

☐ **626902**: Conductivity and temperature

☐ **626903**: pH sensor with pre-installed sensor module

☐ **626904**: pH/ORP sensor with pre-installed sensor module

☐ **626905**: Nitrate sensor with pre-installed sensor module

☐ **626906**: Ammonium sensor with pre-installed sensor module

☐ **626907**: Chloride sensor with pre-installed sensor module

☐ **626210**: Total algae sensor, PC

☐ **626211**: Total algae sensor, PE

Step 4: Order Standards

☐ **065270**: Conductivity standard, 1000 umhos/cm (quart)

☐ **065272**: Conductivity standard, 10000 umhos/cm (quart)

☐ **065274**: Conductivity standard, 100000 umhos/cm (quart)

☐ **603824**: 2 pints each of 4, 7, and 10 pH buffers

☐ **608000**: Turbidity standard, 0 FNU (1 gallon)

☐ **607200**: Turbidity standard, 12.4 FNU (1 gallon)

☐ **607300**: Turbidity standard, 124 FNU (1 gallon)

☐ **607400**: Turbidity standard, 1010 FNU (1 gallon)

☐ **005580**: Confidence Solution® (Conductivity, pH, & ORP

☐ **003841**: 1 mg/L ammonium standard (500 mL)

☐ **003842**: 10 mg/L ammonium standard (500 mL)

☐ **003843**: 100 mg/L ammonium standard (500 mL)

☐ **003885**: 1 mg/L nitrate standard (500 mL)

☐ **003886**: 10 mg/L nitrate standard (500 mL)

☐ **003887**: 100 mg/L nitrate standard (500 mL)

☐ **061320**: Zobell standard for ORP (mV) calibration, 125 mL

☐ **061321**: Zobell standard for ORP (mV) calibration, 250 mL

☐ **061322**: Zobell standard for ORP (mV) calibration, 500 mL

603824   **005580**   **061320**   **003841**   **608000**

Step 5: Order Accessories

☐ **626946**: Large, hard-sided carrying case (Fits 10, 20, and 30 meter cables)

☐ **603075**: Large, soft-sided carrying case

☐ **626945**: Small, hard-sided carrying case (Fits 1 and 4 meter cables)

☐ **599080**: Flow cell for ProDSS 4 port cables

☐ **603076**: Flow cell for ProDSS ODO/CT cables (requires single port adapter; 603078)

☐ **603078**: Adapter required for ProDSS ODO/CT flow cell (603076)

☐ **603056**: Flow cell mounting spike

☐ **063507**: Tripod

☐ **063517**: Ultra clamp

☐ **603070**: Shoulder strap

☐ **603069**: Belt clip

☐ **626918**: 1 lb weight - stackable on guard (A 1 lb. weight is included with ProDSS 4 port cables 10 meters and longer)

☐ **605978**: 4.9 oz weight - stackable on guard

☐ **626942**: USB car charger

☐ **626943**: Small external USB portable battery pack

☐ **626944**: Large external USB portable battery pack

626945   **626918**   **605978**   **063507**   **599080**

Replacement Parts

☐ **626846**: Rechargeable Lithium-ion battery pack

☐ **626969**: USB flash drive with user manuals and KorDSS

☐ **626991**: USB cable for charging and PC connection

☐ **626992**: Cable for connection to USB stick

☐ **626990**: Cable maintenance kit for ProDSS 4 port cables

☐ **626919**: Sensor guard kit for ProDSS 4 port cables

☐ **599786**: Calibration/storage cup for ProDSS 4 port cables

☐ **627195**: Calibration cup for ProDSS ODO/CT cables

☐ **603062**: Cable management kit

☐ **626940**: AC charger (USA). Includes power supply and USB cable (626991)

☐ **626941**: AC charger (International). Includes power supply, USB cable and outlet adapters

☐ **626890**: ODO Sensor cap for ProDSS optical dissolved oxygen sensor (626900)

☐ **627160**: ODO Sensor cap for ProDSS ODO/CT assemblies (627150)

☐ **627180**: ODO Extended Warranty Sensor cap for ProDSS ODO/CT assemblies (627150); features 2 year warranty; comes pre-installed on new ODO/CT assemblies

☐ **626320**: ODO Sensor cap for ProODO assemblies (626250)

☐ **626482**: ODO Sensor cap for ProOBOD assemblies (626400 or 626401)

☐ **626963**: ProDSS pH sensor module (for 626903 sensor)

☐ **626964**: ProDSS pH/ORP sensor module (for 626904 sensor)

☐ **626965**: ProDSS Nitrate sensor module (for 626905 sensor)

☐ **626966**: ProDSS Ammonium sensor module (for 626906 sensor)

☐ **626967**: ProDSS Chloride sensor module (for 626907 sensor)

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Xylem |ˈzīləm|

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.

For more information on how Xylem can help you, go to www.xylem.com

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