

**xylem**  
Let's Solve Water



# Aquaculture

APPLICATIONS, CAPABILITIES & SOLUTIONS

AQUACULTURE CATALOG  
W25-08



a xylem brand

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## Thank you

Thank you for considering YSI as your supplier of water quality instrumentation. As the demand for high quality aquaculture production increases, the need for water quality instrumentation to ensure a healthy harvest and minimize negative environmental impacts is also increasing.

YSI, the manufacturer of handheld instruments you've used and trusted for years, is here to help. We have expanded our offering of DO meters, handheld instruments and continuous monitors and have designed them specifically for the aquaculture professional.

We pride ourselves in developing and manufacturing industry-leading instrumentation to help make your job easier, provide reliable data for decision making and improve the efficiency of your facility. We are here to support you in your work. Our knowledgeable customer service and technical support staff are here to help with any instrument or application questions you may have.

Thank you for your interest in YSI and for reviewing our catalog. Please contact us with any questions, concerns or comments.

Laura St. Pierre | Product Segment Manager

# Connect with YSI



## Application Notes

Aquaculture Resources  
[ysi.com/aquaculture](http://ysi.com/aquaculture)



[ysi.com/weknowDO](http://ysi.com/weknowDO)

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

Download **The Dissolved Oxygen Handbook**  
[ysi.com/DOhandbook](http://ysi.com/DOhandbook)



## YSI Blog

Aquaculture Resources  
[ysi.com/ysi-blog/aquaculture](http://ysi.com/ysi-blog/aquaculture)



## Aquaculture Videos

Aquaculture Resources  
[video.ysi.com/aquaculture](http://video.ysi.com/aquaculture)

## Connect with Us



Facebook  
[facebook.com/myYSI](http://facebook.com/myYSI)



LinkedIn  
[linkedin.com/company/ysi](http://linkedin.com/company/ysi)



Twitter  
[twitter.com/ysiinc](http://twitter.com/ysiinc)



YouTube  
[youtube.com/ysiinc](http://youtube.com/ysiinc)

## Applications

Aquaponics  
Aquatic Life Support  
RAS (recirculating systems)  
Raceways  
Ponds  
Cages  
Live Haul  
Aquariums  
Research

## Parameters

Dissolved Oxygen  
pH  
Conductivity  
Temperature  
ORP  
Salinity  
Total Dissolved Solids  
Water Velocity  
Chlorophyll  
Blue-green Algae  
Nitrate  
Ammonium/Ammonia  
Chloride  
Meteorological Sensors  
...and more

## Capabilities

Aquaponics  
Aquatic Life Support  
Portable Handhelds  
Continuous Monitoring  
& Control  
Unattended Buoyed  
Systems  
UV Disinfection  
Pumping  
Ozonation  
Feed Timer  
Remote Data Access

# ProDSS<sup>®</sup>



The **YSI ProDSS** (digital sampling system) portable multiparameter meter provides extreme flexibility and convenience for measuring over 20 different parameters. It is the standard spot-sampling and profiling instrument for water quality professionals, especially when the environment demands it. The ProDSS is a true field instrument, built tough with the aquaculture facilities in mind.

## The Ultimate Sampling System

- Digital smart sensors are automatically recognized by the instrument and store calibration data
- User-replaceable cables and sensors
- KorDSS software (included)
- USB on-the-go connector for quick data backup to a flash drive
- Color display and backlit keypad; menu-driven operation
- Long-life, rechargeable lithium-ion battery
- Optional GPS
- Optional depth sensor and up to 100m cable lengths
- Large memory (>100,000 data sets) with extensive site list capabilities
- Built-in barometer for easy DO calibration and virtual vented depth
- Military-spec connectors, waterproof IP-67 rating and rubber over-molded case
- On-screen help feature provides assistance with menu options
- 3-year instrument; 2-year cable and sensor warranty

### ProDSS Parameters

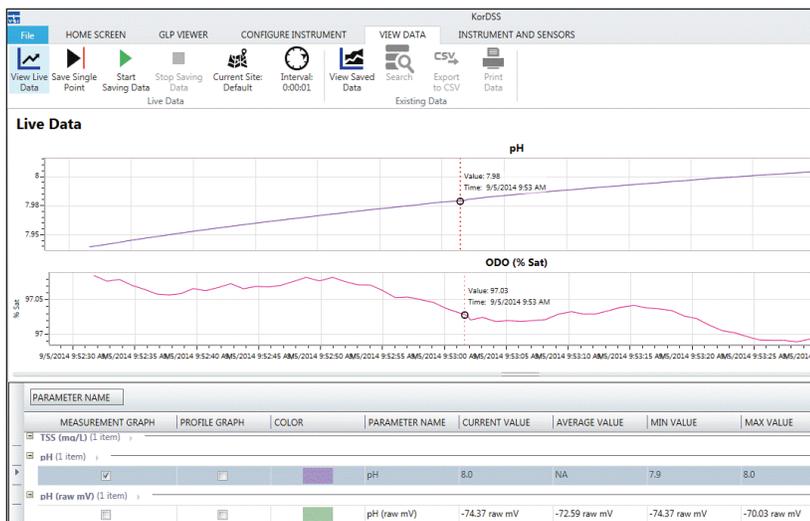
Dissolved Oxygen (Optical)	Chlorophyll
Turbidity	Total Algae
pH	Ammonium
ORP/Redox	Ammonia
Salinity	Chloride
TDS	Nitrate
Resistivity	Temperature
TSS	Barometric Pressure
Depth	Conductivity/ Specific Conductance
Seawater Density	
GPS Coordinates	



## Versatile

The YSI ProDSS handheld multiparameter meter provides extreme flexibility with three main cable options. Choose between the fully loaded 4-port cable assembly outfitted with any four DSS sensors (with depth or no depth) or the ODO/CT probe and cable - where you get accurate DO measurements every time with an optical dissolved oxygen sensor and an inline conductivity sensor, allowing for real-time salinity compensation.

The ProDSS is a true field instrument. The titanium smart sensors (4-port cables) can easily be replaced in the field and our durable locking military spec, bayonet-style cable connector ensures quick and secure cable connection. A rugged and waterproof (IP-67) rubber over-molded instrument case provides protection from the demands of field sampling. The durable cable protects your investment with a 2-year warranty.



## Data Management Software

KorDSS, a powerful data management software is included with the instrument. KorDSS allows you to configure the ProDSS, download and view data and run real-time studies.

## Geo-location

Optional on-board GPS allows you to collect GPS data and water quality data together, at your exact location.

## Is Nitrate Nitrogen Harmful?

Modest levels of nitrate nitrogen may be more harmful to aquaculture-raised rainbow trout than producers realize. A team of scientists at the Conservation Fund's Freshwater Institute led by John Davidson documented deformities and significant behavioral changes in rainbow trout (*Oncorhynchus mykiss*) raised in recirculating aquaculture systems (RAS) with nitrate nitrogen concentrations at levels less than one-tenth the recommended maximum nitrate nitrogen level or less than 100 mg/L. They believe the changes were spurred by chronic exposure to nitrate nitrogen. "If fish are stressed based on a water quality parameter that's present, that could impact performance in other ways, like feed conversion or growth rate," Davidson says.

Nitrate nitrogen levels can build up in RAS systems rapidly as fish excrete ammonia nitrogen and biofiltration systems convert the ammonia nitrogen to nitrate and then to nitrate nitrogen. Davidson and his team monitored nitrate nitrogen levels carefully using two standard lab testing protocols, as well as with the YSI Pro Plus handheld, multiparameter meter. He says instant readings from the handheld meter will be important for staying on top of nitrate nitrogen levels in commercial settings.



Read the full blog - [ysi.com/ysi-blog/aquaculture](http://ysi.com/ysi-blog/aquaculture)

# Professional Plus

The **YSI Pro Plus** accommodates any combination of analog Pro Series sensors and cables. This compact handheld provides extreme flexibility to meet your sampling needs. Simple calibrations, detailed GLP (calibration) data, auto-buffer recognition, mil-spec connectors, re-cal prompts, auto-stable indicators, and security passwords help make your job easier in the field or the lab. The ProPlus is a true professional instrument for the water professional.

## Tough

- Rubber, over-molded IP-67 waterproof case
- 3-year instrument; 2-year cable warranty
- Rugged cables, sensors, and military-spec connectors
- Drop-tested 1 meter at all angles
- Backlit display and keypad

## Smart

- 5,000 data sets in manual mode; up to 50,000 in continuous mode (depending on number of parameters)
- Search function filters user-defined data
- Interval or single-event logging
- 100 folder & site list data structure
- Detailed GLP (calibration) data
- Auto-buffer recognition; up to 6-point pH cal

## Data Manager Software

- Easy-to-use software to manage all data studies, included with instrument
- View, print, and export graphical and tabular data
- Quickly configure one or multiple instruments
- Conduct real-time studies at your aquaculture facility



### Quatro Cable (605790)

This multiparameter cable allows the measurement of temperature, conductivity, salinity, dissolved oxygen, and any two ISEs - pH, ORP, ammonium/ammonia, nitrate, or chloride.

### Cable options for field



Single port cable  
60510 - ISE, pH, ORP  
60520 - DO  
60530 - Cond



Single port cable with conductivity  
6051030 - ISE/Cond  
6052030 - DO/Cond



Dual port cable  
6051010 - ISE/ISE  
6051020 - ISE/DO

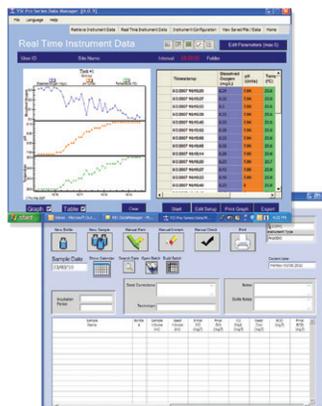


4-port cable  
605790 (ISE/ISE/DO/Cond)



### Cable options for lab

Lab grade ISE  
605107 - pH  
605108 - ORP  
605109 - pH/ORP



# ProSolo

The **ProSolo** handheld meter provides high-accuracy dissolved oxygen measurements with very low maintenance requirements. The ProSolo can be used with ODO/T or ODO/CT probe and cable assemblies.

## Reliable, accurate data:

- 0 to 500%, 0 to 50 mg/L measurement range; accuracy of  $\pm 0.1$  mg/L or 1% of reading, whichever is greater (0 to 20 mg/L)
- Real time salinity compensation for dissolved oxygen measurement when used with an ODO/CT probe and cable
- Optical based sensor doesn't require stirring, increasing the accuracy of the measurement
- Large memory (> 100,000 data sets) with extensive site list capabilities
- USB on-the-go connector for quick data backup to a USB drive

## Tough, designed for field work:

- Waterproof, IP-67 rated rubber over-molded case
- Rugged cables with military-spec connectors
- 3-year instrument warranty, 2-year cable, probe and sensor cap warranty
- Color screen with graphic, backlit keypad for low-light conditions
- Long-life, rechargeable lithium-ion battery

## Low maintenance:

- Optical based sensor requires little maintenance - no membranes to change and no daily calibration required
- ProSolo sensor cap is warranted for 2-years
- ProSolo has extremely low calibration drift

## ProSolo Parameters

- Temperature
- Dissolved oxygen (optical-based sensor)
- Conductivity\*
- Salinity\*
- TDS\*
- Barometric pressure

\*Available on ODO/CT probe and cable assembly only.



## Advanced Data Management

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



# Pro Series

## Dual Parameter

The **YSI Pro Series** handheld instruments provide accurate measurements in a compact, rugged, easy-to-use instrument. Accurate data. Rugged for the field. Perfect for Aquaculture.

### All instruments share:

- IP-67 waterproof rating
- 3-year instrument warranty; 2-year cable warranty
- Quick Calibration; press the CAL key and go - easy and fast
- 50 data-set memory
- Graphic, backlit display and glow-in-the-dark keypad
- Rugged cables, sensors and military-spec connectors
- User-replaceable cables and sensors
- Languages - English, Spanish, French, Portuguese
- Internal barometer for dissolved oxygen (DO) instrument



◀ Military-spec Connector



### Pro2030 Parameters

Temperature  
Dissolved Oxygen  
(electrochemical - galvanic or polarographic)  
Conductivity/  
Specific Conductance  
Resistivity/ Resistance  
Salinity  
Total Dissolved Solids (TDS)

### Pro2030

- Proven, super stable conductivity electrode
- Fast response times; easy to change PE cap membranes

### Pro1020

- Fast response times; easy to change PE cap membranes
- Simplifies DO measurements in changing salinity environments
- Auto-buffer recognition

### Pro1030

- Proven, super stable conductivity electrode
- Auto-buffer recognition

### Pro 1020 Parameters

Temperature  
Dissolved Oxygen  
(electrochemical - galvanic or polarographic)  
pH or ORP

### Pro 1020 Parameters

Temperature  
Conductivity/  
Specific Conductance  
Salinity  
Total Dissolved Solids (TDS)  
pH or ORP

# Pro Series

## Single Parameter

Designed specifically for the rigors of the aquaculture industry, the **YSI Pro Series** instruments are true field meters that are simple, easy-to-use, and rugged.

### All instruments share:

- Tough IP-67, impact-resistant, waterproof case
- Rugged cables, sensors and military-spec connectors
- 3-year instrument warranty; 2-year cable warranty
- 50 data-set memory
- Graphic, backlit display and glow-in-the-dark keypad
- Quick calibration; Press CAL key and go - easy and fast!

### Pro10

- User-replaceable cables and sensors
- Auto-buffer recognition
- Multiple languages include English, Spanish, French and Portuguese
- Available with 1, 4, 10, 20 and 30 meter cable lengths

### Pro20

- Internal barometer
- One Touch Cal completes calibration within 3 seconds
- Choose either Galvanic or Polarographic sensor
- Fast response times; easy to change PE cap membranes
- Multiple languages include English, Spanish, French and German
- User-replaceable cables and sensors

### Pro20i

- Same features as the Pro20 except it includes a built-in, integral cable providing a lower-cost option

### Pro30

- Quick Cal recalls previous calibration values
- Proven, super-stable conductivity cell built into the cable
- Multiple languages include English, Spanish, French and German
- User-replaceable cables and sensors



### Pro10 Parameters

Temperature  
pH or ORP



### Pro20 Parameters

Temperature  
Dissolved Oxygen  
(electrochemical -  
galvanic or polarographic)



### Pro30 Parameters

Temperature  
Conductivity/  
Specific Conductance  
Salinity  
Total Dissolved Solids (TDS)



▲ Sensor installation

# ProSwap

Swap one smart sensor for another with the **ProSwap** digital water quality meter! Featuring built-in temperature and optional depth sensors, ProSwap can transform into whatever you need: a purpose-built turbidity meter or a high-accuracy optical DO meter; a spot sampling pH meter or a profiling conductivity-temperature-depth system. The ProSwap connects with any ProDSS® smart sensor.

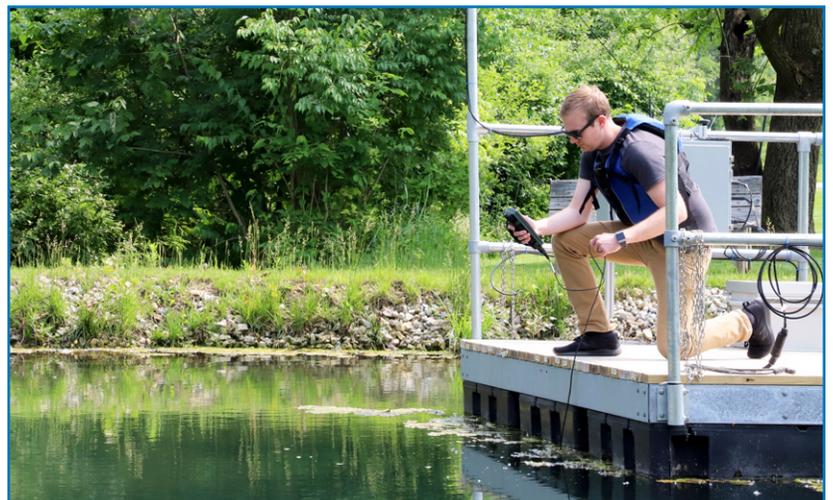


## Simple. Flexible. Reliable

- Connects to any ProDIGITAL integrated probe/cable assembly or any ProDSS digital water quality sensor
- ProDSS digital smart sensors are auto-recognized for easy setup
- User-replaceable sensors and cables with cable lengths ranging from 1 to 100 meters
- IP-67 rubber, over-moded waterproof case and military-spec (MS) cable connector
- Rigorously drop tested from all angles
- KorDSS software (included)
- Data export directly to USB flash drive (included)
- Easy-to-read color display and backlit keypad
- Long-life rechargeable lithium-ion battery (user-replaceable)
- Large onboard memory with storage capacity for over 100,000 data sets
- Simple and quick calibration procedures
- 3-year instrument warranty; 2-year cable and sensor warranty

### Available Smart Sensors

Ammonium ISE  
Chloride ISE  
Conductivity/Temperature  
Nitrate ISE  
Optical Dissolved Oxygen  
pH  
pH/ORP  
Total Algae - PC  
Total Algae - PE  
Turbidity



# EXO<sup>®</sup> Water Quality Monitoring

The **EXO** family of sondes, from YSI, represents the latest multiparameter water quality instrumentation for long-term data collection and early warning detection. User-replaceable smart sensors, combined with a central wiper, ensure quality data collection over extended deployments. Each sonde can be used autonomously or as part of a larger monitoring network to provide real-time information on the health of water bodies.

## Continuous data collection

- Use in fresh or salt water applications
- Flexible sensor payload to install nearly any configuration of parameters for nearly any environment (or project!)
- Seamless integration into monitoring systems with real-time water quality alerts
- Best-in-class anti-fouling technology protects data integrity and extends deployments

## Rugged materials that hold up in harsh environments

- Welded titanium sensors & welded housings with double o-ring seals to prevent leaks
- Wet-mateable connectors resist corrosion

## Reduced cost of ownership

- Rugged, long-lasting optical dissolved oxygen cap
- Replaceable electrode for pH/ ORP and ISEs to extend operational life

### Parameters

Dissolved Oxygen (optical)  
pH  
ORP  
Conductivity/  
Specific Conductance  
Salinity  
Total Dissolved Solids (TDS)  
Blue-green Algae  
Turbidity  
Chlorophyll  
Nitrate  
Chloride  
Ammonium  
Temperature  
Total Suspended Solids (TSS)  
fDOM  
Depth



EXO2

EXO1

EXO3

EXO2s



### Anti-Fouling Central Wiper

The anti-fouling wiper outperforms current leading technologies with a large nylon bristle brush that removes buildup and protects all sensors for up to 90 days between service intervals.



◀ EXO sondes can be integrated into powerful monitoring systems, giving you real-time insights into water quality.

# EcoSense® Handheld Portables

The **EcoSense** line of compact, portable instruments provide accurate data in the most affordable format. The instruments feature an easy-to-use interface, one-hand operation, and a IP-67 waterproof case.

The “M” model instruments feature an extended memory (250 data sets), simple data transfer with a micro-USB port, and a real-time clock and re-calibration timer.



## Handheld Features

- Waterproof case meets IP-67 specs
- 1-year instrument warranty
- Submersible waterproof cables
- Large displays
- Quick, simple calibrations
- 50 data-set memory (“A” models)
- 250 data-set memory (“M” models)

## pH100M/pH100A

The pH100M and the pH100A are economically priced, reliable instruments for measuring pH and temperature. Use with the standard pH electrode or with the flat glass electrode to prevent damage in harsh wastewater applications.

## ODO200M/ODO200

An optical-based dissolved oxygen meter ideal for DO sampling. Optical sensors require less maintenance, hold calibration longer and don’t require stirring compared to membrane-covered sensors. Like electrochemical DO sensors, optical sensors are EPA approved for wastewater compliance reporting.

## DO200M/DO200A

Economical, fast dissolved oxygen measurements with screw-on cap PE membranes that require low stirring. Easy calibration routine with the ability to measure in the field or in the lab with a BOD probe.

## EC300M/EC300A

The EC300M and the EC300A measure conductivity, salinity, total dissolved solids (TDS), and temperature in simple, compact handhelds.

## EcoSense Handheld Parameters

Temperature  
pH  
ORP  
Dissolved oxygen (optical or electrochemical)  
BOD (electrochemical)  
Conductivity/  
Specific conductance  
TDS  
Salinity



## Photometer Parameters

Hardness  
Ammonia  
Nitrate  
Nitrite  
pH  
Copper  
Chlorine  
Alkalinity  
Copper  
... and more

## Photometers

The 9300 and the 9500 both feature a graphic backlit display, on-screen instructions, a waterproof case, various diameter sample tube holder, multiple languages, 100+ test options and direct reading concentrations.

The 9500 has additional features that include a waterproof USB that can also be used for power, 500 data-set memory, and several user-selectable options.



## EcoSense Pen Parameters

Temperature  
pH  
ORP  
Conductivity/  
Specific conductance  
Salinity  
TDS

## pH/EC1030A

The pH/EC1030A offers accurate, low-cost measurement of pH, conductivity, total dissolved solids (TDS), salinity and temperature.

## pH10A

The pH10A is the perfect instrument for economical spot sampling of pH and temperature in applications such as wastewater and surface water. Quickly calibrate with up to 3-point auto-cal.

## ORP15A

The ORP15A offers accurate, low-cost measurement of ORP (absolute and relative mV) and temperature.

## EC30A

The EC30A measures conductivity, TDS, and temperature with an easy, user-replaceable electrode ensuring the instrument is always ready.



## Pen Features

- Waterproof case meets IP-67 specs
- >100 hour battery life with indicator
- 1-year instrument warranty
- Replaceable electrode
- 50 data-set memory
- Hold feature locks stable readings on display
- Graphic display with on-screen instructions

# 5200A Multiparameter Monitor

Designed specifically for aquaculture and aquatic life support systems, the **5200A** integrates water quality monitoring, process control, feeding, alarming and data management into one instrument. Multiparameter functionality for dissolved oxygen, temperature, pH, ORP, conductivity and automatic salinity compensation. Plus, two configurable inputs for additional sensors and management.



## Monitor Features

- Ethernet TCP/IP or wireless communications – optional
- Event logging records calibrations, high and low conditions, and more
- Conditional feed timer with Feed Smart™ software included
- Networking capability; can be integrated with 5400, 5500D monitors and expansion modules
- Flexible dosing and control software
- SMS and email alarming
- Plug-and-play – easy to install, setup, and maintain
- Photo period management
- Control parameters with set points, dosing, or PID functions
- Inputs and outputs capabilities with expansion modules
- Graphic interface function for quick, reliable system-status checks

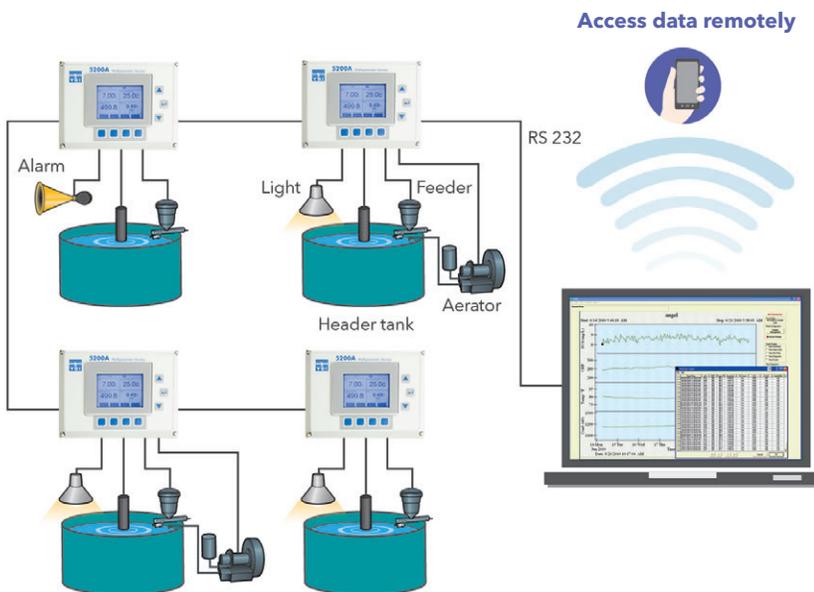
## Outputs/Timers (included)

- 4 each 10A at 110 VAC relays (5A at 240VAC)
- 4 timers – 10 cascading events with start/duration setting
- 1 Feed Smart channel
- Email and/or SMS alarming; up to 3 emails with Ethernet module or up to 10 emails with AquaManager®
- Local alarm; configurable to relay

## Inputs (included)

- DO, pH, ORP, conductivity, temp
- 2 user-configurable inputs, digital or analog (0 to 1.0 VDC, 0 to 5.0 VDC or 4-20 mA)\*

\* IP Network, Wireless, Ethernet, Email, SMS, Alarm, RS232



Example of four monitors individually monitoring and controlling four tanks with direct PC connection. Email and SMS alarming is available from network-connected PC running AquaManager®.

# 5400/5500D MultiDO Monitors

Need a continuous multi-channel dissolved oxygen (DO) monitoring and control instrument designed specifically for aquaculture systems? Easily install and manage a full-scale farming operation with expandable capabilities.

## 5400 & 5500D **Access data remotely**



- Ethernet TCP/IP or wireless communications – optional
- Event logging records calibrations, high/low conditions, and more
- Conditional feed timer with Feed Smart software included
- Networking capability up to 32 instruments per communications port - 5200A, 5400, 5500Ds and expansion modules can be networked together
- Plug-and-play – easy to install, setup, and maintain
- Easily make changes to the monitoring and control settings
- Email and SMS alarming
- Photo period management
- Control parameters with set points, dosing, or PID functions
- Compatible in salt water applications - user configurable salinity range to compensate for DO
- Inputs and outputs capabilities with expansion modules

## Outputs/Timers (included)

- 8 relays 10A at 110 VAC (5A at 240VAC)
- 4 timers – 10 cascading events with start/duration setting
- 4 Feed Smart channels
- Email and/or SMS alarming; up to 3 emails with Ethernet module or up to 10 emails with AquaManager
- Local alarm; configurable to relay

## Inputs (included)

- Up to 4 DO probe inputs
- 6 user-configurable inputs\*, digital or analog (0 to 1.0 VDC, 0 to 5.0 VDC or 4-20 mA)
- 4 auxiliary inputs can be configured for temperature inputs

\*User-configurable inputs can be used for additional sensors like DO, pH, TGP, ORP, photo period, etc. Some sensors require additional transmitter.



The YSI 5400 Continuous Monitor for dissolved oxygen – along with AquaManager® software – integrates process control, feeding, alarming and data management into one product.



The YSI 5500D Optical DO monitoring & control instrument continuously monitors your farming operation's water quality for dissolved oxygen using optical DO technology. Choose 1, 2, or 4 DO channels.

# Expansion Modules

## for Monitoring and Control

Ensure healthy livestock and maximum profits with tighter control of water quality and system parameters. The YSI IOEM and REM expansion modules increase the flexibility and capability of the YSI aquaculture monitoring and control platform when networked with the 5200A, 5400 and/or 5500D instruments.



### IOEM

- 4 (IOEM-4) or 8 (IOEM-8) user-configurable channels as inputs or outputs
- Optically isolated to eliminate electrical interferences and ground loops
- When configured as outputs (4-20 mA) either set point or PID control can be used
- 4-20 mA outputs can interface to a SCADA or PLC system
- Inputs can be used for temperature, analog (0 to 1.0 VDC, 0 to 5.0 VDC or 4-20 mA) or digital\*

### REM

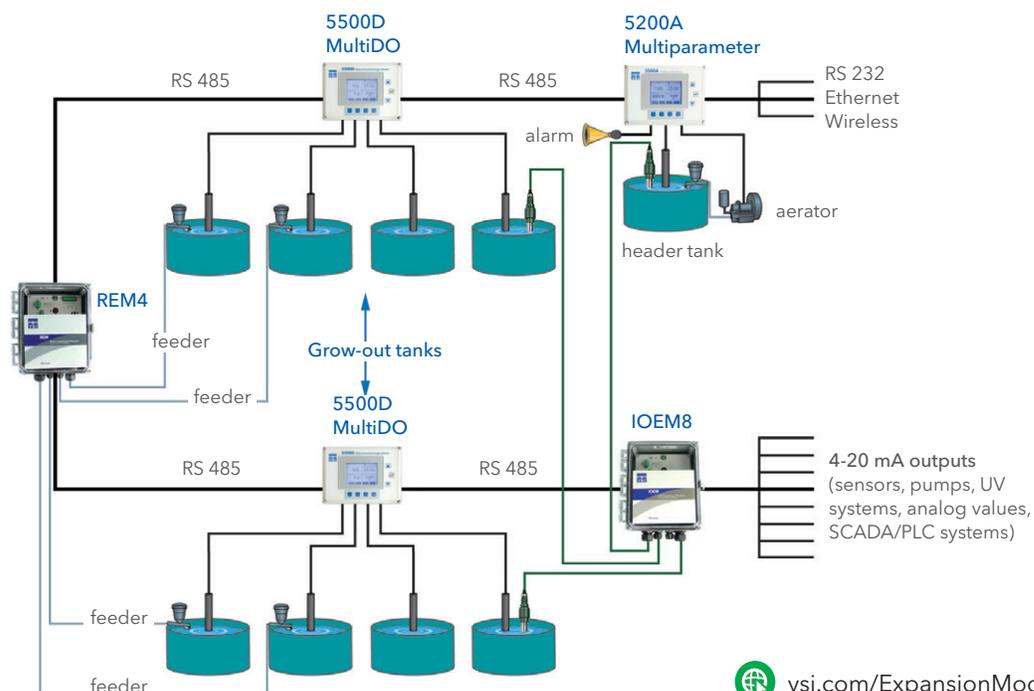
- 4 user-configurable output relays

### IOEM & REM

- Plug-and-play: easy to install, setup and maintain
- NEMA 4X enclosure (IP-66 rated)
- AC and DC power (DC power can be used for battery back-up if used with AC power)
- 2-year warranty

\* User-configurable inputs can be used for additional sensors like DO, pH, TGP, ORP, photo period, etc. Some sensors require an additional transmitter.

Example of three monitors individually monitoring and controlling nine tanks with two expansion modules to control feeders, lighting, and to send data to SCADA/PLC system.



# AquaViewer II & AquaManager®



AquaViewer II App screenshot of mapped parameters with status conditions.

## AquaManager® Software\*

AquaManager desktop software (optional) allows you to control and set up any instrument on the network to view data, set alarming options, and change relays or set points depending on application – conveniently from one central location.

Instantly see an overview of your facility, manage parameter set points, and manage your data in order to make informed operational decisions in real time.

The facility-mapping feature provides an immediate overview of all ponds or tanks indicating their current state.

All parameter and system settings can be managed from the desktop with the AquaManager software.

## AquaViewer II App

The AquaViewer II app helps you keep a close eye on the water quality in your aquaculture or aquatic life support facility, remotely. It's Monitoring Made Mobile!

The AquaViewer II app displays current and logged data acquired from YSI continuous monitoring and control aquaculture instruments - the 5200A, 5400 and 5500D. Water quality data are updated every 10 seconds giving the operator precise, real-time information. Additionally, data is logged every 10 minutes to a secure, cloud-based server provided by YSI/Xylem.

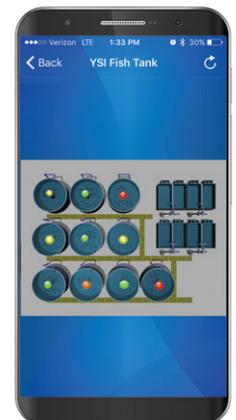
- Real-time water quality data, accessible at a finger's touch
- Easily view the status of your tanks with color-coded icons
- Alarms can be sent via email, text and badge notifications to ensure you are alerted when alarm conditions are met
- Data is saved on a remote server every 10 minutes, providing backup of historical information that is easily accessible
  - Xylem-provided, secure, cloud-based system hosts data for the customer
  - Easily view historical data
- Configure tanks and map in AquaManager for display in the app
- Greater flexibility to display data with responsive pages that adapt to the size of your screen (mobile-friendly)
- Easy to use with simple menu structure

## Feed Smart™ (included with monitors)\* Conditional feed timer around the clock

Feed Smart software can be used as a basic feed timer or conditional feed timer. Manages feed delivery based on user-selectable inputs for the number of daily feedings, daily feed weights, total biomass and feed conversion ratios (FCRs) along with parameter control based on water quality values which reduces, or stops, feeding as water quality deteriorates.

\*Applies to the 5200A, 5400 and 5500D monitors

The AquaViewer II App can display a map of your facility with status icons, so you can quickly see if maintenance or action is needed.



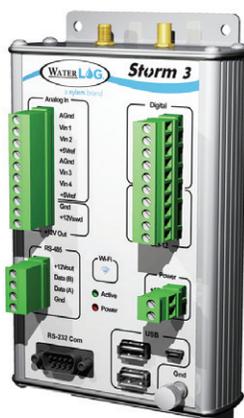
# Offshore Monitoring and Early Warning Systems

Farming in offshore and open-sea environments requires rugged equipment to withstand the impacts of the harsh natural surroundings.

It also requires robust communication and telemetry systems for sending the necessary data to keep fish healthy and protected.

For offshore or near-shore fish farming, YSI provides a complete monitoring solution. Systems collect and send vital data to alert against potentially hazardous water quality conditions and continually monitor currents and meteorological conditions.

- Best-in-class anti-fouling technology
- Protect your investment with email alarms delivered directly to personnel
- Limit service trips by delivering real-time data back to your office
- Minimize installation and infrastructure costs with a system designed for autonomous operation (generates its own power)



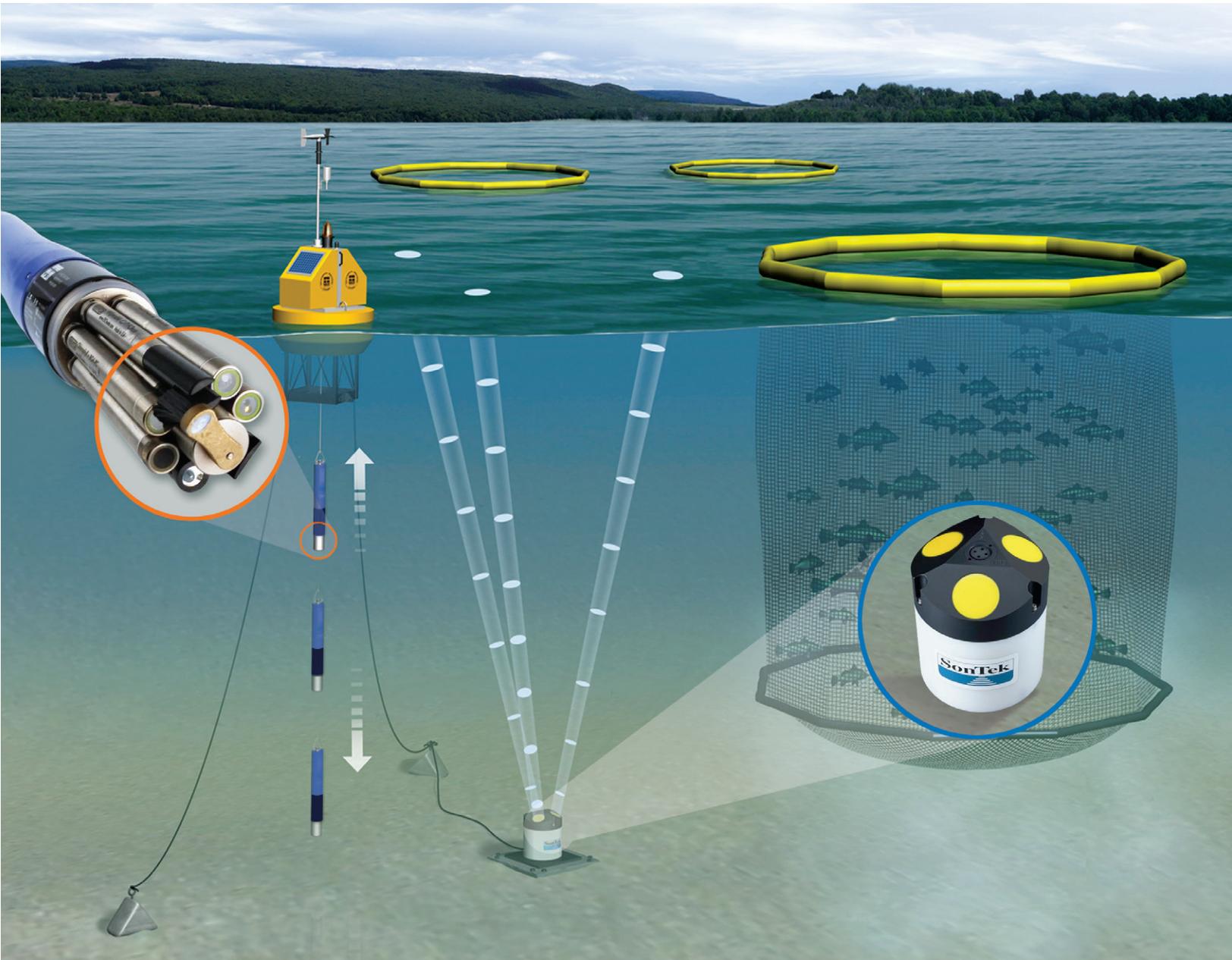
## Storm 3

The Storm 3 data logger incorporates a balanced set of inputs for analog, digital I/O and SDI-12 smart sensors to allow communication through GOES satellite and cellular telemetry. System configuration and data logging are easily performed using an intuitive browser-based interface accessible from any PC, tablet, and smartphone.

- Built-in sensor library
- Browser-based graphical user interface
- Direct or wireless connection for set-up
- Data hosting or direct connectivity option

### Parameters

Dissolved Oxygen, pH,  
Conductivity, ORP, Salinity,  
Turbidity, Chlorophyll,  
Blue-green algae,  
Hydrocarbons, PAR, Water  
velocity, Wind speed and  
direction, Relative humidity,  
and Temperature



YSI can configure a system to include any number of buoys, weather stations, or fixed platforms along with data acquisition via cellular and radio telemetry or web-enabled via Storm3.

# 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.

**For more information on how Xylem can help you, go to [www.xylem.com](http://www.xylem.com)**



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