Aquaculture

APPLICATIONS, CAPABILITIES & SOLUTIONS

YSI

a **xylem** brand

Applications

Aquaponics
Aquatic Life Support
RAS (recirc 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

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aquaculture

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
Senior Product Manager, WQS

ProDSS

The YSI ProDSS (digital sampling system) portable multiparameter meter provides extreme flexibility for measuring up to 17 different parameters. Digital smart sensors are automatically recognized by the instrument when connected. A backlit color display, large memory, convenient calibration procedures, rechargeable battery, optional GPS, and powerful PC data management program (KorDSS) make the ProDSS the ultimate sampling instrument.

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 data download
- Color display and backlit keypad; menu-driven operation
- Long-life, rechargeable lithium-ion battery
- Optional GPS
- Optional depth sensor and up to 100-m cable lengths
- Large memory (>100,000 data sets) with extensive site list capabilities
- Built-in barometer for easy DO calibration and virtual vented depth
- Multiple languages: English, Spanish, Portuguese, French, German, Italian, Japanese, Norwegian, and Chinese
- Military-spec connectors, waterproof IP-67 rating and rubber over-molded case
- On-screen help feature provides assistance with menu options
- 3-year instrument warranty; 2-year cable warranty; 2-year warranty on most sensors

Versatile

The YSI ProDSS handheld multiparameter meter provides extreme flexibility with two 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 with 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 military spec locking 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 with industry-leading 2-year warranty protects your investment.

Parameters

Dissolved Oxygen (optical)
Turbidity
pH
ORP/Redox
Conductivity
Specific Conductance
Salinity
Total Dissolved Solids (TDS)
Resistivity
Seawater Density
Total Suspended Solids (TSS)
Ammonium
Ammonia
Chloride
Nitrate
Depth
Temperature
GPS

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.**

bit.ly/nitrateRAS

Professional Plus

The YSI Pro Plus accommodates many Pro Series sensor and cable combinations to meet your sampling requirements. This compact handheld includes simple calibrations, detailed GLP data, on-screen-specific help instructions, auto-buffer recognition, military-spec connectors, re-cal prompts, auto-stable indicators, and security passwords to help make your job easier.

Parameters
Temperature
Conductivity/ Specific Conductance
Resistivity/ Resistance
Salinity
TDS
Dissolved Oxygen (electrochemical - galvanic or polarographic)
pH
ORP
Ammonium/Ammonia
Chloride
Nitrate
Barometric Pressure

Tougher

- Rubber, over-molded IP-67 waterproof case (even without battery cover)

- 3-year instrument warranty; 2-year cable

- Rugged cables, sensors, and military-spec connectors

- Drop-tested 1 meter at all angles

- Backlit display and keypad

Smarter

- 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 data

- Auto-buffer recognition; up to 6-point cal

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

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

ProODO®

Parameters
Temperature
Dissolved Oxygen
(optical)

The ProODO® is the most widely used handheld optical dissolved oxygen (DO) instrument on the market for many reasons. Its combination of versatility, field-worthy durability, and data management is second to none and will ensure you get the right DO measurement every time. The ProODO's rugged design is verified with an IP-67 waterproof rating (even without the battery cover); military-spec connectors; and rigorous drop, cable flex, and strength tests.

Tougher

- Rubber, over-molded IP-67 waterproof case (even without battery cover)
- 3-year instrument warranty
- 2-year cable and probe warranty
- Drop-tested 1 meter at all angles
- Rugged cables and military-spec connectors
- Scratch-resistant lens; viewable with polarized glasses
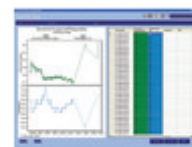- DO caps last 18 to 24 months

Smarter

- Optical, luminescent technology eliminates membranes
- Low maintenance - no anode or cathode
- Get accurate readings with every measurement - no stirring required
- No interference from hydrogen sulfide or other gases
- 5,000 data sets in manual mode; up to 50,000 in continuous mode
- Expanded DO range of 0-500%; 0-50 mg/L
- 100 folder & site list data structure
- Interval or single-event logging

O·DO®

Optical DO

Optical technology eliminates stirring requirement and interferences, ensuring consistent data and less user error.

Data Manager Software

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

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
- 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

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

Pro2030 Parameters
Temperature
Dissolved Oxygen (electrochemical - galvanic or polarographic)
Conductivity/ Specific Conductance
Resistivity/ Resistance
Salinity
Total Dissolved Solids (TDS)

Pro1020 Parameters
Temperature
Dissolved Oxygen (electrochemical - galvanic or polarographic)
pH or ORP

Pro1030 Parameters
Temperature
Conductivity/ Specific Conductance
Salinity
Total Dissolved Solids (TDS)
pH or ORP

Military-Spec Connector

ysi.com/pro2030
ysi.com/pro1020
ysi.com/pro1030

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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

• 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-m 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, German

• User-replaceable cables and sensors

Pro20i
• Same features as the Pro20 except it includes a built-in, integral cable proving 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, German

• User-replaceable cables and sensors

Sensor Installation

EcoSense®

OK, we get it. Sometimes your budget won't allow for a higher priced instrument with more features. So you need a basic instrument to do your job without sacrificing data quality. Our EcoSense® line of instruments are simple, easy to use, and designed for the field with IP-67 waterproof rating.

Handhelds

pH100A
Measures pH or ORP and temperature. Use with the standard pH electrode or with the flat glass electrode to prevent damage in harsh applications.

ODO200A
Simultaneously measures dissolved oxygen, using optical technology. Optical DO sensors don't require stirring, ensuring accurate measurements every time and no membrane changes or electrodes to clean. Sensor caps last 18-24 months, lowering cost of ownership.

DO200A
Economical, fast dissolved oxygen measurements with screw-on cap PE membranes that require low stirring.

EC300A
Measures conductivity, salinity, TDS, and temperature in a simple, compact handheld.

Pens

pH/EC 1030A
A dual parameter pen for the measurement of pH, conductivity, TDS, and temperature for quick and accurate results.

pH10A
The perfect pen for economical spot sampling of pH and temperature. Quickly calibrate with up to 3 auto-buffer recognition. Replaceable pH electrode lowers replacement costs.

ORP15A
Offers accurate, low-cost measurement of ORP (Redox - absolute and relative mV) and temperature. User-replaceable electrode lowers replacement costs.

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

9300 and 9500
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 port for data download that can also be used for AC power, 500 data-set memory, and several user-selectable options.

ysi.com/EcoSense
ysi.com/photometers

Parameters

pH100A
Temperature
pH or ORP

ODO200A
Temperature
Dissolved Oxygen (optical)

DO200A
Dissolved Oxygen
Temperature

EC300A
Temperature
Conductivity/
Specific Conductance
Total Dissolved Solids (TDS)
Salinity

pH/EC1030A
pH
Conductivity
TDS
Temperature

pH10A
pH
Temperature

ORP15A
ORP
Temperature

EC30A
Conductivity
Temperature

9300/9500
Hardness
Ammonia
Nitrate
Nitrite
pH
Copper
Ozone
Chlorine
Alkalinity
…and more

EXO 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.

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

EXO2s   EXO3   EXO1   EXO2

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

EXO's superior anti-fouling technology prevents sensor drift.

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

ysi.com/EXO

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. Mulitparameter functionality for dissolved oxygen, temperature, pH, ORP, conductivity, and automatic salinity compensation. Plus, two configurable inputs for additional sensors and management.

- 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
- Graphic interface function for quick, reliable system-status checks
- Plug-and-play — easy to install, setup, and maintain
- Photo period management
- Control parameters with set points, dosing, or PID functions
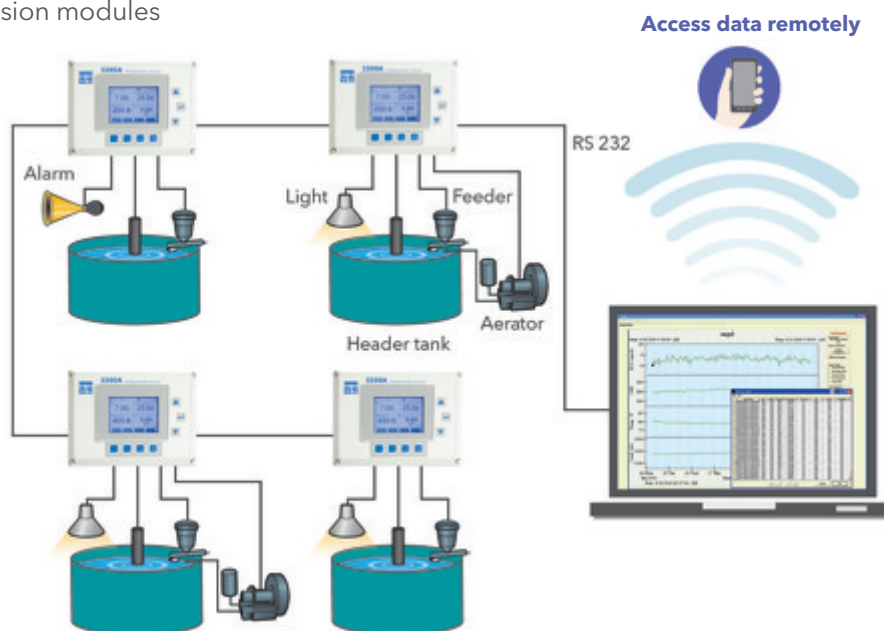- Inputs and outputs capabilities with expansion modules

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 and 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 an 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
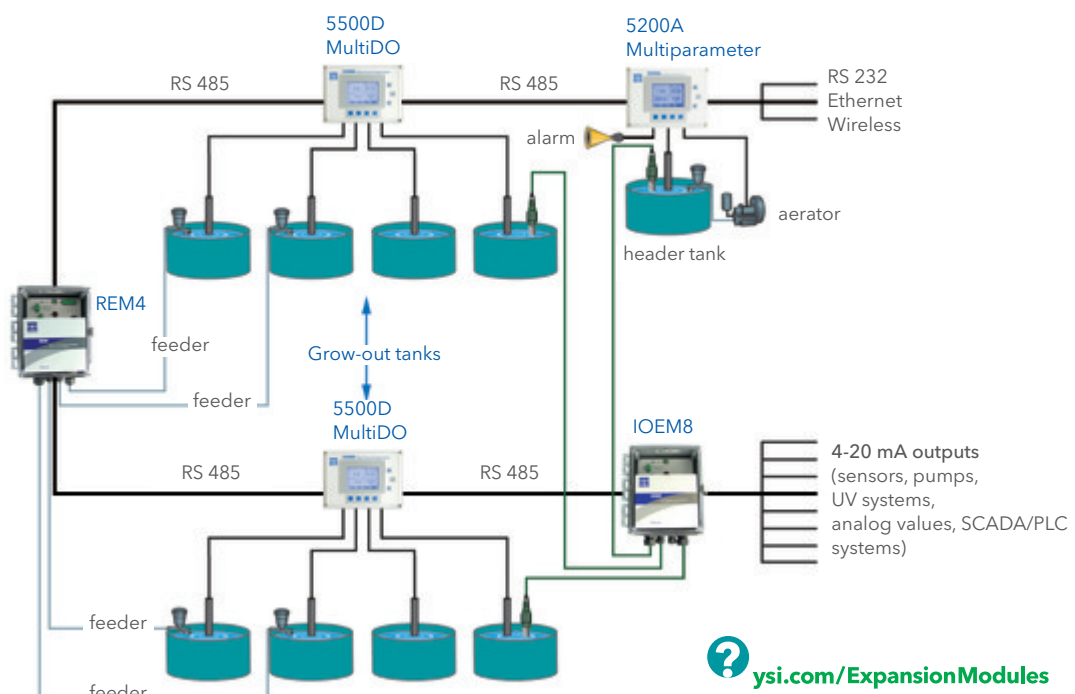- Inputs can be used for temperature, analog (0 to 1.0 VDC, 0 to 5.0 VDC or 4-20 mA) or digital*

REM

- 4 user-configurable output relays

IOEM and 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.
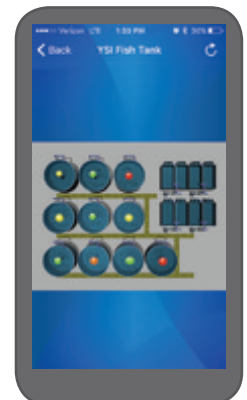
• Real-time water quality data, accessible at a finger's touch
• Easily view the status of your tanks with color-coded icons
• Alarms can be sent via email, text and badge notifications to ensure you are alerted when alarm conditions are met
• Data is saved on a remote server every 10 minutes, providing 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.

ysi.com/AquaManager   ysi.com/AquaViewerII

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)
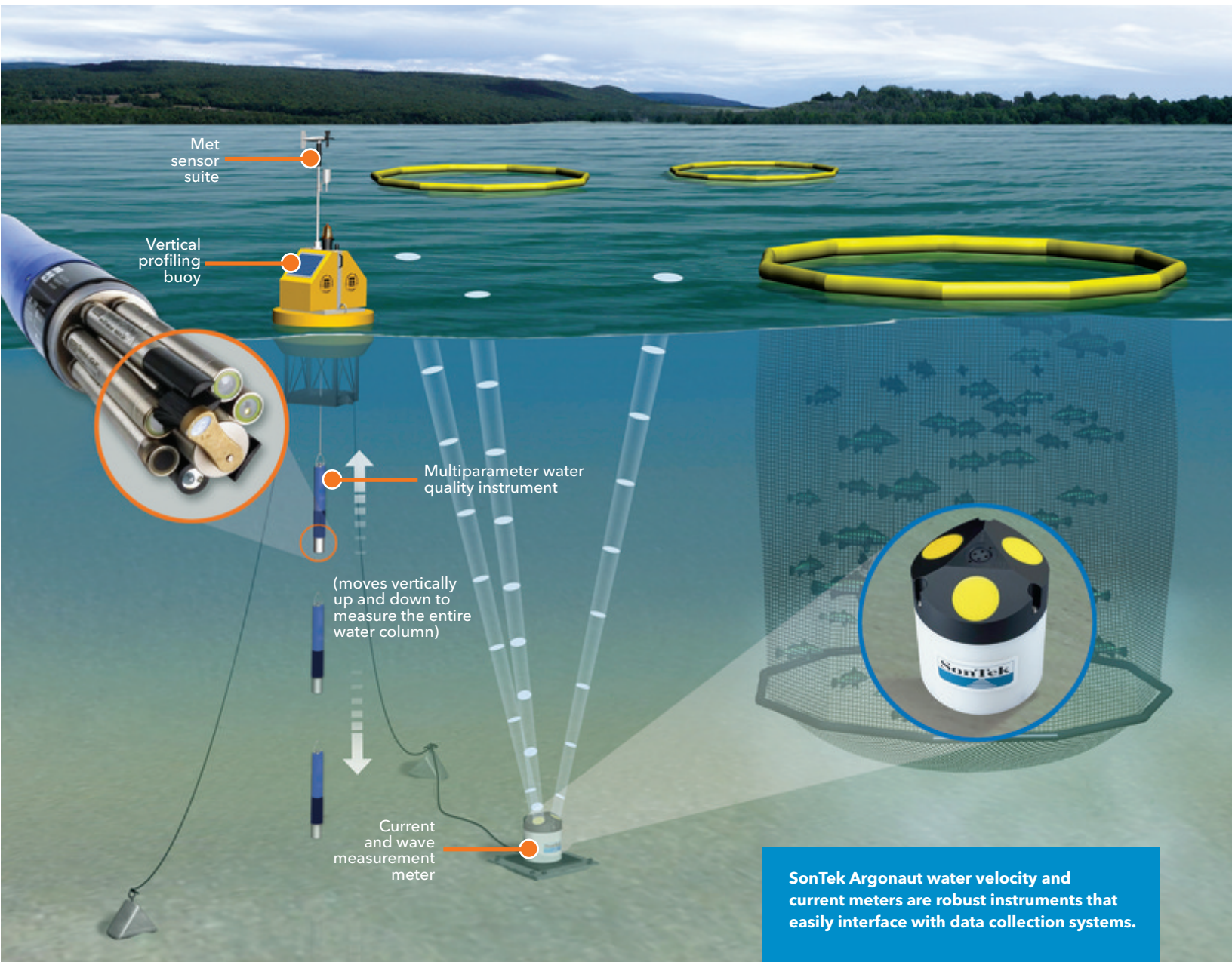
Storm 3

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

Met sensor suite

Vertical profiling buoy

Multiparameter water quality instrument

(moves vertically up and down to measure the entire water column)

Current and wave measurement meter

SonTek Argonaut water velocity and current meters are robust instruments that easily interface with data collection systems.

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.

Watch this system in action at: **bit.ly/seacages**

Other Xylem Partners in Aquaculture

AADI offers real-time monitoring systems for aquaculture.
• monitor growth conditions
• oxygen levels in fish cages
• reference conditions inside cage vs. outside
• monitor cage's flow-through capacity
• integrate data with local control systems
aanderaa.com

Wedeco manufactures reliable, chemical-free, and environmentally-friendly water and wastewater treatment technologies, including ultraviolet (UV) disinfection and ozone oxidation systems.
wedeco.com

Flygt pumps are an ideal solution to facility water circulation, fish waste removal, and pumps suitable for seawater applications.
flygt.com

Goulds offers a portfolio of industrial pumps, valves and monitoring and control equipment, offshore water treatment systems, and plant optimization and efficiency systems, as well as aftermarket services and parts.
gouldspumps.com

WaterLOG® is a world leader specializing in manufacturing precision water level instrumentation, and data logger telemetry systems for hydrological and meteorological measurements. We take pride in providing a broad range of innovative equipment capable of reliable measurements in extremely harsh conditions.
waterlog.com

Connect with YSI

Watch the YSI 5200A at the Newport Aquarium.
bit.ly/YSI5200ANewport

YSI Blog **ysi.com/blog**

Enter to win a ProODO
Optical Dissolved Oxygen Handheld **ysi.com/win**

Enter to win a 5500D Multi Optical Dissolved Oxygen
Continuous Monitor **bit.ly/YSIwin5500D**

Download The Dissolved Oxygen Handbook –
the definitive guide on DO **ysi.com/DOhandbook**

Application Notes

Aquaculture Resources
ysi.com/aquaculture

WE KNOW ™
D.O.

ysi.com/weknowDO
View dissolved oxygen technology webinars,
videos, selection guides, product spec sheets,
and more at our dissolved oxygen resource page.

Connect with YSI on:

Facebook
facebook.com/myYSI

Twitter
twitter.com/ysiinc

Scoop.it
scoop.it/t/aquaculture

LinkedIn
linkedin.com/company/ysi

YouTube
youtube.com/ysiinc

Tumblr
myysi.tumblr.com

Pinterest
pinterest.com/myYSI

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, and agricultural settings. With its October 2016 acquisition of Sensus, Xylem added smart metering, network technologies and advanced data analytics for water, gas and electric utilities to its portfolio of solutions. 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 **xyleminc.com**

xylem
Let's Solve Water

YSI
a xylem brand

Who's
Minding
the **Planet?**

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