Water Monitoring Solutions
Water is our most precious resource.

And all our systems help you measure and protect it.

YSI and its divisions take great pride in designing, building, and servicing the high-precision instruments that help you collect accurate and reliable water quality and velocity data.

Our instruments and accessories are field-proven for applications such as:

Aquaculture  
Bridges & Dams  
Coasts & Estuaries  
Groundwater  
Lakes & Ponds  
Oceans  
Ports & Harbors  
Reservoirs  
Rivers & Streams  
Wastewater  
Wetlands
Why YSI?

For 60 years, YSI has pioneered the development of high-quality instrumentation for use in natural waters.

Our technology saves you time:

Meeting the global need for improved environmental monitoring requires fewer technical personnel and a lower cost of ownership. YSI provides accurate sampling and turn-key monitoring solutions, equipment that is easy to use and install, and intuitive interfaces.

Our reliability improves efficiency:

Successful monitoring efforts depend on accurate and defensible data. We deliver reliable instruments and continuously develop safeguards and system checks to ensure you obtain the highest-quality data as quickly as possible.

Our employees understand your challenges:

Our staff has extensive field experience which helps them provide viable solutions and hands-on support for your monitoring challenges.

Our customers can reach us:

We have 17 global offices on 5 continents.

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### Professional Plus
- Measures any combination of dissolved oxygen, pH, conductivity, ORP, ammonium, nitrate, chloride, salinity, total dissolved solids, barometric pressure, and resistivity
- Interval or single-event logging with 5,000 data set memory and 100 site list and file folder capabilities; GLP conforming data
- Features on-screen help, backlit display and keypad, user-replaceable cables and sensors, and auto-buffer recognition
- Lab-grade pH and ORP and lab BOD also available

### ProODO
- Non-consumptive optical DO luminescent method eliminates the need for stirring
- Expanded DO range of 0-500%
- Field-rugged user-replaceable cables in lengths up to 100 meters
- Digital technology stores cal data in the sensor so you can place it on any ProODO instrument

### Pro20
- Choose between polarographic or galvanic DO sensors
- Interchangeable probes and cables reduce down-time
- Measures dissolved oxygen and temperature in lab and field
- Industry’s quickest DO response saves you time
- One Touch Cal feature calibrates within seconds

### Pro30
- Conductivity, salinity, specific conductance, TDS
- Proven, rugged four-nickel electrode
- 3-year instrument and 2-year cable/probe warranty

### Pro2030
- Choose between polarographic or galvanic DO sensors
- Interchangeable probes and cables reduce down-time
- Measures dissolved oxygen, conductivity, salinity, TDS, and temperature
- Automatically compensates DO for changes in salinity

### ProOBOD™ Probe
- Self-stirring optical BOD probe
- Two-year warranty
- No warm-up required
- Extremely quiet operation
- Guarded cap protects sensor

### Data Manager Desktop Software
- Free with ProPlus and ProODO
- Easy-to-use software to manage all data, set up instruments, or conduct real-time studies
- View graphical and tabular data
- USB connection powers the instrument

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**Applications**
- Groundwater
- Wastewater
- Aquaculture
- Surface water

**Parameters**
- Temperature
- Dissolved oxygen
- pH
- ORP
- Conductivity
- Specific conductance
- Salinity
- Total dissolved solids
- Resistivity
- Barometric pressure
- Ammonium/ammonia
- Nitrate
- Chloride
- BOD

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**Quick Links**
ysi.com/proplus
ysi.com/proODO
ysi.com/proOBOD
ysi.com/pro20
ysi.com/pro2030
ysi.com/pro30

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**Sampling & Testing**
Sampling & Testing

Colorimetry  
EcoSense  
Laboratory

**Single-Parameter**
- **900 Chlorine**  
  • Measure chlorine (free and total)
- **910 COD**  
  • Measure COD (various ranges)

**Multiparameter**
- **pHotoFlex STD**  
  • Measures 85 tests
- **pHotoFlex pH**  
  • Measures 138 tests plus pH with pH electrode

**Photometers**
- **9300 & 9500**  
  • 100+ tests, including hardness, ammonia, calcium, and nitrate
  • Non-hazardous reagents with long shelf life
- **pH100A**  
  • pH
  • Auto-buffer recognition
  • 1-, 2-, or 3-point calibration
- **ORP15A**  
  • ORP (absolute or relative mV)
  • 50-data set memory
- **EC30A**  
  • Conductivity, salinity
  • 1-year warranty
  • IP-67 waterproof

**Handhelds**
- **pH100A**  
  • pH and mV
  • IP-67 waterproof
  • 50-data set memory
- **DO200A**  
  • DO and BOD
  • IP-67 waterproof
  • 50-data set memory
- **EC300A**  
  • Conductivity, salinity and TDS
  • IP-67 waterproof
  • 50-data set memory

**Dissolved Oxygen & BOD**
- **5000 & 5100**  
  • Lab standard for DO and BOD
  • Auto-Cal function

**Conductivity**
- **3100 and 3200**  
  • High-precision electrodes with temperature sensors
  • Simple to advanced

**pH**
- **pH1200**  
  • Lab grade pH, mV
  • Auto-buffer recognition

**MultiLab IDS**
- **1-, 2-, or 3-channel meters**
  • Lab optical BOD, pH, ORP and conductivity

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**Applications**
Groundwater  
Wastewater  
Aquaculture  
Surface water  
Industrial

**Parameters**
Temperature  
Dissolved oxygen  
pH  
ORP  
Conductivity  
Level  
Specific conductance  
Salinity  
Total dissolved solids  
Resistivity  
Barometric pressure  
Ammonia  
Calcium  
Chlorine  
BOD  
COD  
Hardness  
Iron  
Nitrate  
Alkalinity and more

**Quick Links**
ysi.com/photometers  
ysi.com/laboratory  
ysiecosense.com

**Contact**
800 897 4151 US  
+1 937 767 7241
Sampling, Logging & Profiling

**600LS sonde**
- Designed for spot sampling level measurements and tide gauge measurements

**600R**
- Conductivity and temperature sensors and options to add pH and Rapid Pulse™ dissolved oxygen
- Ideal for large monitoring programs and educational applications

**600XL and 600XLM sondes**
- Ideal for water level monitoring, ground water and surface water monitoring
- Includes DO, temperature, and conductivity sensors and options to add pH or pH/ORP, depth, and vented level
- XLM has batteries for unattended, *in situ* monitoring

**600XL/600XLM V2 sondes**
- Ideal for water level monitoring, ground water and surface water monitoring
- Includes DO, temperature, and conductivity sensors and options to add pH or pH/ORP, depth, and vented level
- Includes one optical sensor port for dissolved oxygen, blue-green algae, chlorophyll, rhodamine, or turbidity
- XLM has batteries for unattended, *in situ* monitoring

**650MDS Multiparameter Display System**
- Connects to any 6-Series multiparameter instrument
- Easily log real-time data, calibrate, and set up sondes for deployment
- Upload data to a PC
- Optional barometer and GPS interface

**CastAway™-CTD**
- 5 Hz response and sampling rate
- Accurate to 0.1 PSU, 0.05°C
- Internal GPS
- Bluetooth wireless data download
- No user calibration required
- No tools, computers or cables required

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**Applications**
- Short-term studies
- Lake & stream sampling
- Groundwater wells
- Tide gauge measurements
- Sound velocity profiles
- Saltwater intrusion
- Hydrographic surveying
- Coastal research
- Fisheries

**Parameters**
- Conductivity
- Temperature
- Depth
- Vented level
- pH
- ORP
- Dissolved oxygen
- Turbidity
- Nitrate
- Ammonium
- Chloride
- Salinity
- Sound speed

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**Quick Links**
ysi.com/sondes
ysi.com/castaway

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**Contact Information**
800 897 4151 US
+1 937 767 7241
Long-term Monitoring

**6600 V2 sonde**
- Large sensor payload capability and long battery life
- Choose between 2 and 4 optical ports for dissolved oxygen, blue-green algae, chlorophyll, rhodamine, and turbidity
- Also available with a pH wiping system

**600OMS V2 sonde**
- Perfect for applications such as turbidity or oxygen monitoring
- Accepts 1 optical sensor as well as conductivity, temperature, and depth

**6820 V2 sonde**
- Cost-effective sampling system with up to 15-parameter reporting capability
- Ideal for profiling and spot-checking
- Choose between 1 and 2 optical ports

**6920 V2 sonde**
- Economical, 15-parameter logging system
- Battery powered for long-term, in situ monitoring and profiling
- Choose between 1 and 2 optical ports

**EXO1 sonde**
- Surface and groundwater monitoring down to 250 m (828 ft)
- Bluetooth wireless communication
- Quick and easy calibration of multiple sensors
- Welded titanium sensors including conductivity, dissolved oxygen, fDOM, pH, ORP, turbidity, and total algae

**EXO2 sonde**
- CTD plus 3-5 additional sensors
- Coastal and marine monitoring down to 250 m (828 ft)
- Seamless integration and "daisy chaining" into monitoring systems
- Flexible sensor payload/configurations
- Welded titanium sensors
- Antifouling wiper helps to extend deployments to more than 90 days

**Applications**
- Continuous monitoring
- Source water
- Lake profiling
- Dredging
- Underway sampling
- PAR studies
- Algal bloom monitoring
- Coastal studies
- Saltwater intrusion

**Parameters**
- Conductivity
- Temperature
- Dissolved oxygen
- Chlorophyll
- Blue-green algae
- Turbidity
- Rhodamine
- Depth
- Vented level
- PAR
- pH
- ORP
- fDOM

800 897 4151 US
+1 937 767 7241

Quick Links
ysi.com/sondes
EXOwater.com
Continuous Monitoring & Control

Wastewater

Applications
- Wastewater process monitoring
- Aquaculture monitoring and control
- Fisheries

Parameters
- Conductivity
- Temperature
- Dissolved Oxygen
- pH
- ORP
- Salinity
- Turbidity
- TSS
- Ammonium
- Nitrate
- Potassium
- COD
- BOD
- DOC
- SAC
- TOC

IQ SensorNet
- Process monitoring for up to 20 parameters
- Change or move parameters at any time
- 3-year warranty
- 1 cable for power and communications
- Up to 48 output channels
- Control pumps, blowers and more
- Simple, modular system
- Communications via modem, MODBUS, RS-232, Bluetooth wireless technology
- Use compatible modules without extra wiring

UV-VIS
- Measure nitrate, TSS, COD, TOC, DOC, BOD, SAC
- Uses UltraClean technology to prevent fouling

FDO
- Optical dissolved oxygen

5500D/5400 Monitor
- MultiDO monitors using optical DO technology (5500D) or galvanic technology (5400)
- Control multiple set points for DO
- Email and SMS alarms
- Event logging records conditions, calibrations and more
- Network up to 32 instruments

5200A Monitor
- Multiparameter monitor: DO, temperature, conductivity, pH, ORP, salinity
- Network up to 32 instruments
- Ethernet TCP/IP or wireless communication
- Email and SMS alarms
- Conditional feed timer with Feed Smart® software
- Monitor and control one tank or a whole operation

AquaViewer App
- Download from the App Store
- Continuously view facility water quality data

IFL
- Interface sludge level

VisoSolid/VisoTurb
- TSS and turbidity

Other sensor options and multiple accessories available

800 897 4151 US
+1 937 767 7241
Velocity, Currents & Flow

ADPs (Acoustic Doppler Profilers)
• Rugged, multi-purpose current profilers
• Configure for real-time monitoring and autonomous deployment
• Profiling to 200 meters
• Options for bottom tracking, directional waves, and integrated external sensors

Argonaut®-XR
• Affordable and easy-to-use current profiler
• Automatically adjusts sampling volume with changing tide level or river stage
• Bottom-mounted for near-shore deployments
• Wave height and spectra

Argonaut®-MD
• Oceanographic single-point current meter for deployments up to one year
• Clamps directly to mooring line or use cage
• Standard compass/tilt and temperature sensors, and optional pressure and conductivity sensors

MicroADV
• Three-axis velocity measurement for hydraulics research in labs
• Sampling rates up to 50 Hz; sampling volume 0.09 cc
• Excellent for low-flow and turbulence studies

HydroSurveyor
• Collect bathymetric, water column velocity profile, and acoustic bottom tracking as part of hydrographic survey
• Includes ADP platform and powerful data collection software
• Water sound speed corrections interpolated in space and time when bundled with CastAway-CTD

Argonaut®-MD

Applications
Bottom boundary
Currents
Discharge
Tide level
Flow/low flow
Sediment transport
Flumes
Near-shore monitoring
Waves

Quick Links
sontek.com/oceanography.html
sontek.com/laboratory.html

+1 858 546 8327
Velocity, Currents & Flow

**Argonaut®-ADV**
- Single-point, shallow-water flow monitoring
- Rugged ADV head and internal battery pack for autonomous deployment
- Ideal for streams, marshes, lakes, and water treatment facilities

**Argonaut®-SL**
- 2D, side-looking velocity, level, and flow meter
- Calculates flow/discharge via theoretical or index-velocity ratings
- Installs on side of river or open channel for easy access and quick maintenance
- Measures remotely, avoiding flow interference from piers or pilings

**SonTek-IQ**
- Specifically designed for open channels
- Velocity profiles in three dimensions with cells as small as 2 cm (0.8 in)
- Robust measurements in complex flow conditions
- Velocity, level, flow and total volume ranging from 0.3-16 ft (0.09-5.0 m)
- Outputs: SDI-12, Modbus, 4-20 mA, ASCII and RS-232

**SonTek-IQ Pipe**
- Designed for closed conduits
- Velocity profiles in three dimensions with cells as small as 2 cm (0.8 in)
- Robust measurements in complex flow conditions
- Velocity, level, flow and total volume in pipes with diameter between 1.5-16 ft (0.45-5.0 m)
- Outputs: SDI-12, Modbus, 4-20 mA, ASCII and RS-232

**Applications**
- Discharge calculation
- Stream indexing
- Real-time flow
- Irrigation
- Wastewater effluent

Quick Links
sontek.com/hydrology.html

+1 858 546 8327
Velocity, Currents & Flow

**Applications**
Discharge calculation  
Stream indexing  
Real-time flow  
Irrigation

**RiverSurveyor**
- Accurately measures discharge from moving boats  
- Computes complete 3-D velocity profile and bathymetric channel cross-section in minutes  
- Optional tethered platform for measurements from bridges  
- Features multi-frequency velocity beams for robust bottom tracking and vertical beam for precise bathymetric surveying  
- Internal DGPS with RTK option  
- Embedded echosounder

**FlowTracker Handheld ADV**
- Wading discharge or velocity measurements in streams, weirs, flumes, and open channels  
- Easily attaches to top-setting wading rod  
- SmartQC for instant feedback on data quality  
- Supports multiple river discharge methods and current velocity measurements  
- Output data directly into FlowPack  
- Multi-language

**FlowPack Software**
- Store flow, velocity, and stage measurements in one software  
- Generate velocity-index ratings and comprehensive reports

**Flow Display**
- Options for 4-20 mA outputs  
- Connect to the SonTek-IQ and read flow data in the field without connecting to a laptop

+S1 858 546 8327
Hydrological Monitoring

**Quick Links**
waterlog.com

**Applications**
Water level monitoring
Dams and bridges
Reservoir and tanks
Remote data delivery
Real-time alerts

**Storm 3**
Browser-based Datalogger
- Simple and intuitive browser-based GUI
- GUI works on PCs, laptops, tablets and smart phones
- Direct (USB) or Wi-Fi connection
- Linux-based OS

**System 5000**
Datalogger
- Easy-to-read color display with LED backlight and touch screen
- Built-in graphical user interface
- LINUX-based operating system
- 256 MB internal data logging memory (expandable to 4 GB)

**H-522+ DCP**
Data Collection Platform with Integrated Satellite Transmitter
- Satellites supported: GOES/METEOSAT/INSAT
- Menu-driven setup
- Integral GPS with random and self-timed transmissions
- Upgradable to future protocols such as NOAA/NESDIS V2.0

**H-2221**
High Data Rate Satellite Transmitter
- Highest accuracy radio for reliable satellite transmissions in extreme environments
- Supports 100, 300 and 1200 BPS (GOES)
- Menu-driven setup
- Low standby power
- Integral GPS with random and set-timed transmissions
- Upgradable to protocols such as NESDIS V2.0

**H-3553**
Self-contained Bubbler
- Bubbler/pressure sensor in one unit
- Built-in display version
- Depths to 115 ft (35 m)
- No needle valve or diaphragm problems
- Automatic or manual controlled purge up to 90 psi
- Purge sustain feature
- Dependable mass flow rate control
- Nitrogen tank not required

**H-3600 Series**
Radar Sensor
- Non-contact level measurement replaces stilling wells and other infrastructure
- Not susceptible to damage from debris
- Less maintenance than tide and stage sensors
- Measurement range up to 230 ft (70 m)

**H-3123**
Submersible Pressure Sensor
- 0.02% FSO accuracy
- SDI-12 output
- Measurement transmitted digitally over long cable lengths without error
- Vented pressure sensor

**H-340-SDI**
Tipping Bucket Rain Gauge
- Magnetic reed switch sensor
- 0.01” or 0.2mm tip versions available
- SDI-12 output

**H-3342**
Absolute Shaft Encoder
- Absolute, optical encoder preserves correct position even if power is lost
- Accuracy 0.00024 ft
- Built-in display with “Push to Read” button
- SDI-12, 4-20 mA outputs

+1 435 735 2212
12
Integrated Systems

Environmental Monitoring Modules

- **Coastal Buoys** for high energy environments and large sensor payloads
- Proven design deployed around the world
- Standard wave, current, and water quality solution without customization
- In-house design and manufacturing for solutions with alternative telemetry, prototype instruments, larger hulls, and custom software solutions
- Engineered with oceanographic-grade materials

- **Inland Buoys** for lakes and rivers
- Can be deployed by several people in small watercraft
- Designed for years of reliable operation
- Tamper- and vandal-resistant for public areas
- Batteries situated to lower center of gravity

- **Small Buoy** for short-term, project-based deployments
- Integral deployment tube protects multiparameter water quality sonde
- Submersible rechargeable battery pack acts as buoy ballast weight
- One base station collects data from network of buoys
- Easily deployable

**Applications**
- Baseline studies
- Dredging
- Emergency response
- Fisheries
- Non-point source/TMDL
- Point source/discharge
- Stormwater & CSO
- Source water
- Lakes
- Estuaries
- Bays
- Continental shelf

**Parameters**
- Water quality
- MET
- Currents
- Nutrients
- PAR
- Hydrocarbons

877 392 9950 US
+1 727 565 2201
Integrated Systems

EcoNet™
• Delivers remote data to web or workstation
• Automated data reports, alarms, and alerts
• No programming necessary; changes made through graphic interface
• Add up to 15 sensors and more than 50 parameters to a single station
• Simplifies network with hosting, delivery, reporting, and maintenance services from single supplier

EcoMapper™
• Autonomous underwater vehicle with remote control
• Deployable by one person
• High-resolution mapping of water quality, current, and bathymetry over large areas
• Easy-to-use mission planning software
• Triple frequency side-scan sonar
• 6/10 beam Doppler velocity log
• Iridium tracking capabilities
• 100 meter max rating

Applications
Remote data delivery
Real-time alerts
Reservoir monitoring
Aquaculture
Algal bloom monitoring
Discharge
Bottom mapping
Drinking water intake

Parameters
Water quality
MET
Currents
Nutrients
Bathymetry
Side-scan sonar

Quick Links
yisystems.com
ysi.com/ecomapper

877 392 9950 US
+1 727 565 2201
Services

We can partner with you to provide:

• Project definition
• Site evaluation
• Systems design
• Integration and testing
• Construction and installation
• On-site training
• Data collection and delivery
• Extended support and service contracts
• Project management
• Rental

SeaKeeper 1000™

• Automated underway sampling system on ship
• No crew interaction needed
• Actively contribute to environmental and climate research
• Satellite communication from anywhere in the world
• YSI installs and maintains the system
What can Xylem do for you?

We’re 12,500 people unified in a common purpose: creating innovative solutions to meet our world’s water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. 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, backed by a legacy of innovation.

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

ECO CALCULATIONS REPORT
YSI Inc. saved the following resources by using Neenah Environment paper made with a minimum of 30% post-consumer fiber and 100% renewable electricity.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Trees</td>
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<tr>
<td>Energy (BTUs)</td>
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<tr>
<td>Greenhouse gas</td>
<td>324.09</td>
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<tr>
<td>Waste water</td>
<td>258 gal</td>
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<tr>
<td>Solid waste</td>
<td>43 lbs</td>
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