In-Situ Inc. is a leading manufacturer of in-situ (on-site) water monitoring instruments for surface water and groundwater applications. Since 1976, we have provided water monitoring professionals with innovative solutions, such as the Aqua TROLL 500, with the industry’s first mobile app, for environmental monitoring.

While we’re known for high-accuracy water quantity, quality and flow instrumentation, we’ve expanded our portfolio of products and services to support remote access to decision-quality data via easy integration with VuLink™, our game-changing cellular and satellite telemetry device, and our cloud-based HydroVu™ Data Services platform.

Our growing water quality platform has been engineered for maximum reliability and minimum hassle. Internal data logging, extended battery life, drift-resistant sensors, and active and passive antifouling systems are some of the features that ensure years of performance in fresh water and saltwater applications. Quality equipment designed to work together, exceptional remote-monitoring capability, and simple integration with your systems lowers the total cost of ownership, reduces trips to the field, and makes data collection and analysis easier than ever.

Our team of experts can help you find the right solution for your project, and our support team is always standing by to offer complimentary, 24/7 technical support and mobile help in the field. We’re also happy to rent our equipment to you, fully serviced, calibrated, and ready to go.

APPLICATIONS

RUGGED RELIABILITY, INTUITIVE SOFTWARE, AND SENSOR ACCURACY FROM CALIBRATION TO FIELD DEPLOYMENT MEAN THAT YOU CAN FOCUS ON GETTING THE JOB DONE RIGHT.

MINING / FRACKING
Aqua TROLL 100, 200, 400, 500

AQUACULTURE
Aqua TROLL 400, 500, smarTROLL RDO, RDO PRO-X, Titan

MONITORING WELLS

STORMWATER
Aqua TROLL 400, 500, 600

H2O TREATMENT
RDO PRO-X, Titan, Aqua TROLL 400, 500

REMEDIATION
Aqua TROLL 200, 500, 600

LAKES / RIVERS / WETLANDS
Aqua TROLL 400, 500, 600, smarTROLL RDO

DAMS / RESERVOIRS
RDO PRO-X, Titan, Aqua TROLL 400, 500

COASTAL
Aqua TROLL 100, 200, 500, 600
REMOTE MONITORING SOLUTIONS

Remote Monitoring Solutions

Data Services
HydroVu™ Data Services:
• Organize multiple projects, users, and instruments in one cloud-based location.
• Get secure, real-time access to decision-quality data anywhere, anytime.
• Simplify the task of filtering data for useful results.

Cellular and Satellite Telemetry
• In-well device features one-press set up, expanded coverage, and two-to-five times the battery life of other devices.
• Cellular coverage with 4G LTE Category M1/NB-IoT and 2G networks, or Iridium satellite coverage, futureproofs your system.
•Includes continuous GPS, encrypted connections, enhanced in-device alarms, desiccant-free operation, and IP68 waterproof rating.

Instruments
Water Quality Instruments:
• Field-ready durability with accurate results in even the harshest applications.
• Easy-to-use spot checking handhelds with mobile device technology.
• Long-term monitoring probes with extended battery life and stable sensor technology.
Aqua TROLL® 600 Multiparameter Sonde

Customizable, powerful, and portable multiparameter sonde suitable for all applications. Internal power and data logging. Low power consumption with replaceable Alkaline D batteries for 9+ month life. Available sensor options include optical RDO, with EPA-approved RDO technology, pH/ORP, turbidity, conductivity, temperature, pressure, nitrate, chloride, ammonium, chlorophyll a, phycoerythrin (BGA-PE), phycocyanin (BGA-PC), rhodamine WT.

- Vented (gauged) or non-vented (absolute) pressure measurement
- LCD display for visual indication of overall probe functionality
- Sub-2 inch active and passive antifouling system with cleanable conductivity
- Wireless communication with smartphone interface
- Flexible communication protocols (4-20 mA, SDI-12, RS-485)

Aqua TROLL® 500 Multiparameter Sonde

This cost-effective multiprobe combines highly stable sensors with automated wireless or wired data collection. Use this rugged instrument as a spot-checking handheld with our VuSitu Mobile App, or easily connect to telemetry or control system for long-term monitoring.

- Wet-mateable sensors and low-maintenance deployment reduce cost of ownership
- LCD display shows instrument health and wireless connectivity
- Automatic environmental compensation and simplified calibration
- Available sensor options: RDO, turbidity, conductivity, pH/ORP, temperature, pressure, nitrate, chloride, ammonium, chlorophyll a, phycoerythrin (BGA-PE), phycocyanin (BGA-PC), rhodamine WT
- Modbus/RS485 or SDI-12 protocols

Aqua TROLL® 400 Multiparameter Probe

Compact and durable multiparameter process probe that continuously measures 12 water parameters in a variety of applications. Standard suite of six sensors measure actual and specific conductivity, salinity, total dissolved solids, resistivity, density, optical dissolved oxygen, ORP, pH, temperature, water level, and water pressure.

- DO readings automatically compensate for salinity
- Versatile power options and real-time readings (non-powered and non-logging)
- Real-time data access with a radio, controller, data logger, sampler, telemetry system, or SCADA/PLC system
- Flexible communication protocols (4-20 mA, SDI-12, RS-485)

Aqua TROLL® 200 Data Logger

Measures and records water level, pressure, conductivity, and temperature. Compact construction fits any deployment, and titanium electrodes and housing protect your data by preventing corrosion.

- Sub-1 inch diameter
- Full-range conductivity with optimum accuracy - 0 to 100,000 μS/cm
- Vented (gauged) or non-vented (absolute) pressure measurement
- Dynamic density compensation for accurate pressure measurement
Aqua TROLL® 100 Data Logger

Measures and records conductivity and temperature. Compact construction fits any deployment, and titanium electrodes and housing protect your data by preventing corrosion.

- Sub-1 inch diameter
- Full-range conductivity with optimum accuracy
- 0 to 100,000 μS/cm
- Sealed to withstand pressure of up to 500 psi
- Flexible communication protocols (4-20 mA, SDI-12, RS-485)

RDO® PRO-X Optical Dissolved Oxygen Probe

Measures optical dissolved oxygen and temperature using optical technology in process applications. No calibration, conditioning, or membranes required.

- Most accurate and rugged optical DO sensor on the market
- Only probe with diagnostic tools to evaluate sensor health
- Flexible communication protocols (4-20mA, Modbus/RS485, and SDI-12)
- Standard 10m cable or twist-lock options in custom cable lengths

RDO® Blue

Measures optical dissolved oxygen and temperature in environmental applications. No calibration, conditioning, or membranes required.

- Suitable for handheld use or long-term deployment in freshwater or saline environments
- Ryton construction and complete internal potting for saltwater resistance and enhanced reliability
- Includes Modbus/RS485 communication protocol
- Robust performance at a reduced cost

Optical Rugged Dissolved Oxygen Technology

In-Situ’s patented RDO® technology uses an EPA-approved dissolved oxygen measurement method ideal for measuring DO and temperature in the harshest environments.

Accurate and reliable, optical RDO is also easy to use, with a multilayer, abrasion-resistant formulation, a long-lasting and easily replaceable smart cap that carries calibration onboard, and instant hydration to eliminate the need for conditioning prior to use.
WATER QUALITY INSTRUMENTS - KEY FEATURES

SHARED ECOSYSTEM
Reduce complexity and cost with equipment that works together. All Aqua TROLL products use the same ecosystem—from handheld to cable to communication.

3D FACTORY CALIBRATION
In-Situ performs a multi-point factory calibration on every sensor. This calibration ensures that the sensor is linear across its full range and reduces the complexity of user calibration.

LOW-MAINTENANCE DEPLOYMENT
Reduce trips to the field with ultra-low-power electronics and long-life batteries. Add telemetry to the system to automate data collection.

ENHANCED RELIABILITY
In-Situ equipment is designed to withstand use in the harshest environments.

VUSITU MOBILE APP
Streamline data management with convenient Log Set-Up and Calibration Assistants, instrument diagnostics, panoramic live data, and seamless translation into multiple languages delivered right to your smartphone or tablet. Instantly access each of your sites, view and share data from anywhere, and receive automatic event alerts.

RUGGED CABLE
Kevlar strands ensure that our cable won’t stretch or break. Titanium twist-lock connectors enable quick, reliable connections, and Kevlar Grip provides redundant security. Use with the Rugged Cable Splitter to measure multiple parameters at various depths simultaneously.