



# IN-SITU WATER QUALITY

Instruments



# YOUR EYES IN THE FIELD



***In-Situ***

**WATER QUALITY**

**Instruments**

**RICE** Earth  
Sciences

A DIVISION OF RICE RESOURCE TECHNOLOGIES

# APPLICATIONS

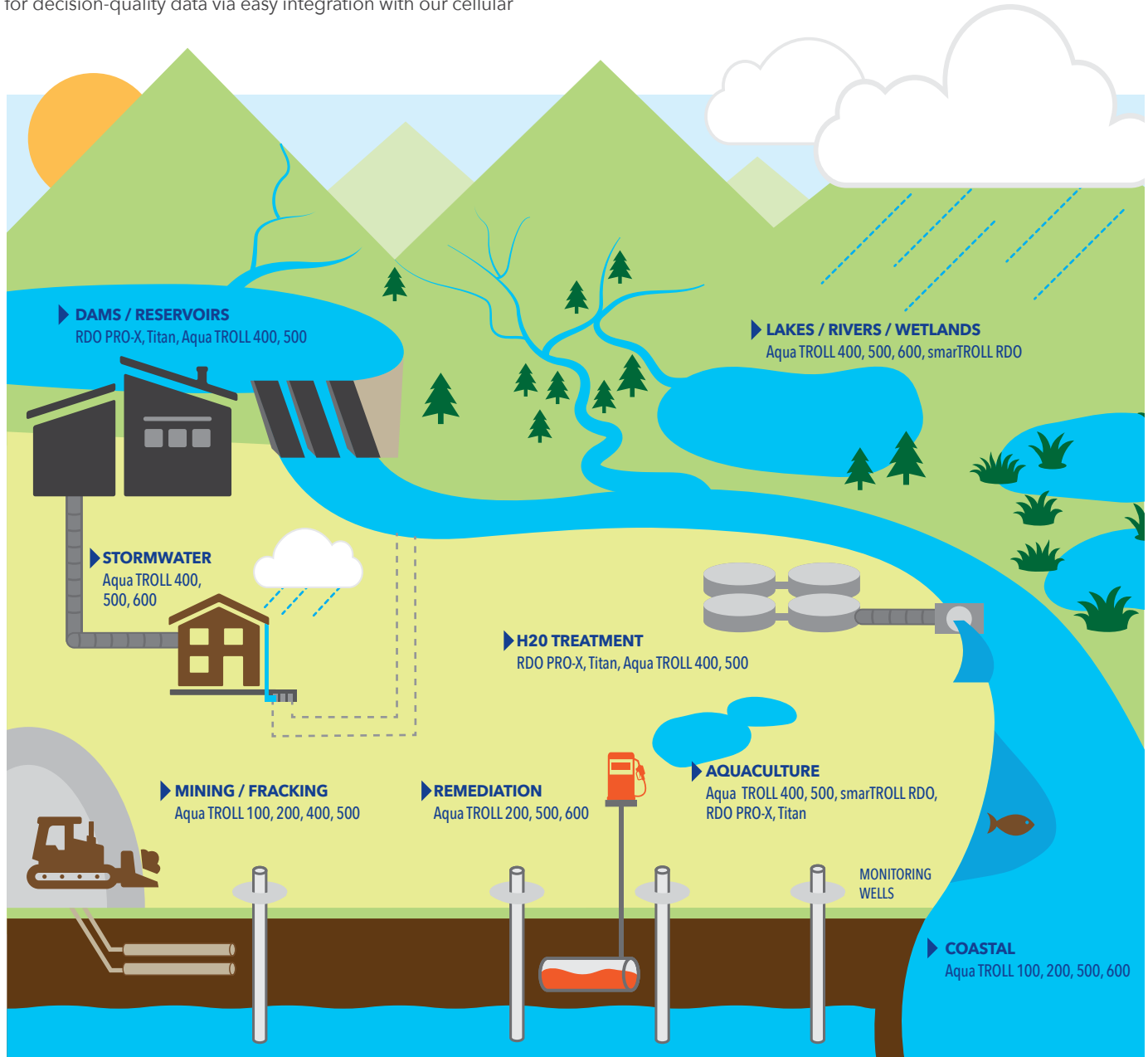
**RUGGED RELIABILITY, INTUITIVE SOFTWARE, AND CONFIDENCE YOUR SENSORS WILL BE ACCURATE FROM CALIBRATION TO FIELD DEPLOYMENT, REGARDLESS OF THE CONDITIONS... SO YOU CAN FOCUS ON WHAT REALLY MATTERS - GETTING THE JOB DONE RIGHT**

In-Situ® Inc. is a leading manufacturer of in-situ (on-site) water monitoring instruments for groundwater and surface water applications. Since 1976, we have provided water monitoring markets with innovative solutions, like the smarTROLL™ RDO® Handheld with the industry's first smartphone application for environmental monitoring.

While we're known for high-accuracy water quantity and quality instrumentation, we also have an expanding portfolio of products and services, including a full-solution offering for decision-quality data via easy integration with our cellular

telemetry and 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 and salt water applications, meaning you have a lower total cost of ownership and fewer trips to the field. Plus, our customizable, data-ready sondes don't require costly adapters or proprietary communication protocols. Our instruments, telemetry systems, and data services platform were built for easy integration and user-friendly operation - access to your data has never been this easy.

Our team of experts is ready to 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.

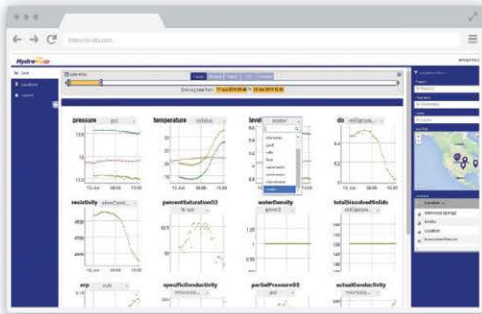


# REMOTE MONITORING SOLUTIONS

**HydroVu™**

The data you need, how you want it.

**VuSitu™**



IN DEPTH DATA ANALYSIS



MOBILE DATA ACCESS



BATTERY POWERED  
5 YEAR LIFE

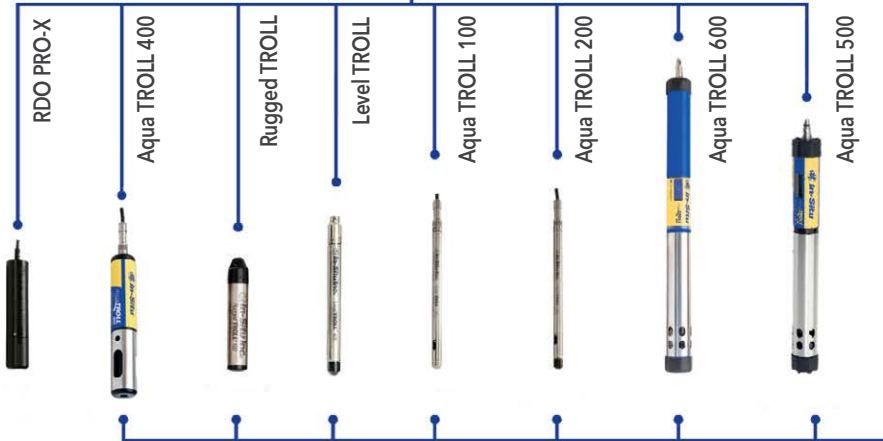
SOLAR POWERED



CONNECT 1 DEVICE



CONNECT UP TO 5 DEVICES



## DATA SERVICES

### HydroVu™ Data Services:

- Organize multiple projects, users and instruments in one cloud-based location.
- Secure, real-time access to decision-quality data anywhere, anytime.
- Simplify the task of filtering data for important results.



## WIRELESS TELEMTRY

- Economical and secure wireless monitoring systems for real-time site feedback.
- In-device alarms, plus automated data, barometric pressure compensation, tampering, and malfunction alerts.
- Compact designs for in-well or networking, depending on your unique monitoring deployment.



## INSTRUMENTS

### Water Quality Instruments:

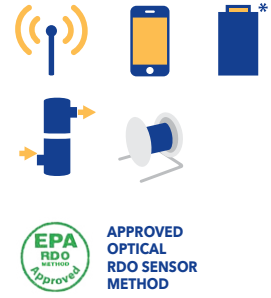
- Field-ready durability with accurate results in even the harshest applications.
- Easy-to-use spot checking handhelds with mobile device technology.
- Long-term monitoring probes with extended battery life and stable sensor technology.

## 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 EPA-approved optical RDO, pH/ORP, turbidity, conductivity, temperature, pressure, nitrate, chloride, ammonium, chlorophyll a, phycocyanin (BGA-PC), phycoerythrin (BGA-PE), 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)

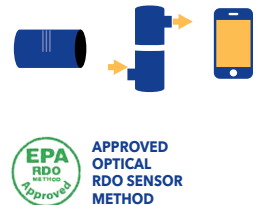


## AquaTROLL 500 Multiparameter Sonde



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 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, phycocyanin (BGA-PC), phycoerythrin (BGA-PE), rhodamine WT



## 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)
- Modbus/RS485 or SDI-12 protocols
- 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  $\mu\text{S}/\text{cm}$
- Vented (gauged) or non-vented (absolute) pressure measurement
- Dynamic density compensation for accurate pressure measurement



# AQUA TROLL AND RDO INSTRUMENTS

## 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  $\mu\text{S}/\text{cm}$
- Sealed to withstand pressure of up to 500 psi
- Flexible communication protocols (4-20 mA, SDI-12, RS-485)



## smarTROLL™ RDO® Handheld



Measures and records optical dissolved oxygen, air and water temperature, and barometric pressure. Data is transmitted wirelessly to your smartphone or tablet. Virtually no training required, and no calibration needed.

- Email and share real-time data on the spot
- Battery Pack with replaceable batteries (iOS) or rechargeable Power Pack (Android)
- Site tagging with photos and GPS coordinates
- RDO Fast Cap provides fast response for spot checking applications and reduces time in the field



APPROVED OPTICAL RDO SENSOR METHOD

## 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



APPROVED OPTICAL RDO SENSOR METHOD

## RDO® Titan Process Probe



Measures optical dissolved oxygen and temperature in process applications. Robust optical sensor requires no membranes and only minimal maintenance and calibrations.

- Most accurate DO probe on the market
- Titanium construction prevents corrosion in saline environments
- Long-lasting and easily replaceable smart sensor cap
- Custom cable lengths available



APPROVED OPTICAL RDO SENSOR METHOD

## KEY FEATURES AND ACCESSORIES



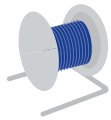
### ANTIFOULING

Prevents fouling from occurring around the probe's sensing area in coastal environments and high-fouling sites with a dual-sided wiper or specially formulated copper guard. Improve the accuracy of your data and extend the length of your deployment.



### RDO FAST CAP

The fastest responding optical RDO sensor on the market, specifically designed for spot checking applications. When the cap expires, simply snap it off and pop on a new one.



### RUGGED CABLE SYSTEM

Durable, long-lasting cables come in custom lengths and provide real-time data communication. Manufactured to endure harsh environments, they deliver high accuracy, precision, and reliability for years. Patented twist-lock connectors provide easy attachment and detachment and protect your investment.



### TELEMETRY CAPABLE

Get real-time feedback from your instruments with cellular device reporting and in-device alarms from the Tube and Cube Telemetry systems. Features include 5+ year battery life, IP68 waterproof rating, optional in-well deployment, automatic barometric compensation, and optional built-in solar panels.



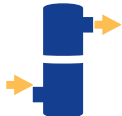
### INTERNAL BATTERY POWER

Replaceable alkaline or internally sealed lithium battery power for frequent fast sampling or longterm deployments. No external power is required.



### INTERNAL DATA LOGGING

Internal data logging for continuous monitoring. Does not require an external data logger.



### LOW-FLOW SYSTEMS

Use your smartphone or tablet to automate the collection of well and pumping information, monitor and record the stabilization of key water quality parameters, and automatically generate calibration and sample reports to conform to federal and regional regulations.



### MOBILE APP FUNCTIONALITY

With the iSitu™ Mobile App for iOS™ and the VuSitu™ Mobile App for Android™, there's no need for expensive, bulky handheld computers to read your sensors. Use your smartphone or tablet to quickly find and recognize each of your sites, and instantly view, download, and share data.