



Aqua TROLL® 600 Multiparameter Sonde

Reduce operational expenses with this customizable, powerful, and easy-to-use multiparameter sonde. The Aqua TROLL 600 combines unique industry-leading water quality technology, built-in LCD display, and revolutionary smartphone mobility. Low power consumption and advanced antifouling for up to 9+ month deployment supports long-term installation in any application.

The Aqua TROLL 600 water quality platform is rugged in groundwater and corrosion-resistant in surface water, delivering accurate, reliable data in an easy-to-use, flexible instrument that performs for years. Base sensor configuration includes EPA-approved optical dissolved oxygen, pH/ORP, turbidity, conductivity, temperature, and pressure. Integrate with In-Situ telemetry systems and HydroVu™ Data Services for real-time feedback on your remote monitoring sites.

Be Mobile

- **Use the Aqua TROLL 600 anywhere:** Titanium components and vented or non-vented options make it perfect for challenging environments and long-term deployments in fresh and salt water. Every detail has been engineered to be easy, reliable, and cost-effective.
- **Save time in the field:** Intuitive software simplifies instrument configuration, data analysis, and reporting. No training required, and no waiting for sensor warm-up or set-up.
- **Streamline data management:** Set up logs and manage data from the field using the VuSitu™ Mobile App. Consolidate all site information on your mobile device and tag sites with photos and GPS coordinates. Log data to your smartphone and download results in a standard file format for profiling, low-flow sampling, and more.

Be In-Situ

- Receive 24/7 technical support and online resources.
- Order products and accessories from the In-Situ website.
- Get guaranteed 7-day service for maintenance (U.S.A. only).

Be Smart

- **Status in an instant:** LCD display gives you an instant visual indication of sensor status, data log, battery life, and overall functionality to give confidence during deployment. The onboard SD card allows for quick and easy data backup and transfer.
- **No fuss antifouling:** Antifouling to protect all sensors. The only multiparameter sonde to have a sub-2 in. active antifouling system with cleanable conductivity.
- **Get accurate results:** Self-compensating turbidity/RDO/level, smart diagnostics, and stable sensor technology provide minimal drift and increased accuracy with NIST-traceable factory calibration report. Smart sensors store information internally, maintaining data and calibration within the sensor for traceable results.

Applications

- Lake, stream and wetland monitoring
- Stormwater management
- Coastal deployments
- Dam monitoring
- Low-flow groundwater sampling
- Remediation and mine water monitoring

CALL OR CLICK TO PURCHASE OR RENT

1-800-446-7488 (toll-free in U.S.A. and Canada)

1-970-498-1500 (U.S.A. and international)

WWW.IN-SITU.COM

General						
Operating Temperature (non-freezing)	-5 to 50°C (23 to 122°F)		External Power	8-16 VDC (not required for normal operation)		
Storage Temperature	Components Without Fluid: -40°C to +65°C (Non-Freezing water) pH Probes: -2°C to +45°C		Reading Rates	1 reading per 30 seconds for all parameters, no wipe 1 reading per 15 seconds for all parameters, with wipe		
Dimensions	4.7 cm (1.85 in.) Ø x 58.2 cm (23.3 in.) (includes connectors) With bail: 72.3 cm (28.2 in.)		Data Logging	10 programmable tests (defined, scheduled to run, or stored) Logging modes: Linear, Linear Average, Point		
Weight	1.45 kg / 3.2 lbs (includes all sensors, batteries, and bail)		Logging Modes	Linear, Linear Average, Event		
Wetted Materials	PC, PC alloy, Delrin®, Santoprene®, Inconel®, Viton®, Titanium, Ceramic, Nylon		Logging Rate	1 minute to 99 hours		
Environmental Rating	IP68 with all sensors and cable attached IP67 without the sensors, battery/cable or cable attached		Communication Device	TROLL Com or Wireless TROLL Com		
Max Pressure Rating	Up to 316 PSI		Cable Options	Vented or non-vented polyurethane or vented Inconel®		
Output Options	RS-485/MQ3060S, SDI-12, Bluetooth®		LCD Display	Integrated display shows status of sensors, sensor ports, data log, and battery		
Internal Memory¹ / Micro SD Card²	16 MB, 8 GB micro SD card included; user-replaceable. Logs in .csv file format.		Software	Android™: Via USB through Google Play™, Windows®: Via-Setu 5, Data Services: HydroView		
Internal Power	2 internal user-replaceable Alkaline D batteries		Interface	Android 4.4, requires Bluetooth 2.0; Via-Setu 5 Software		
Battery Life¹	9 months typical		Certifications	CE, FCC (E338127-B), NIST, RoHS Compliant		
Standard Sensors	Accuracy	Range	Resolution	Response Time	Units of Measure	Method
Temperature³	±0.3°C	-5 to 50°C (23 to 122°F)	0.05	T63<2s, T90<15s, T95<30s	Celsius or Fahrenheit	EPA 170.1
Barometric Pressure (standard on all models)	±0.5 mbar	300 - 1,100 mbar	0.1 mbar	T63<1s, T90<1s, T95<1s	Pressure: psi, kPa, bar, mbar, inHg, mmHg, cmH2O, inH2O	Silicon strain gauge
pH⁴	±0.1 pH units or better	0 to 14 pH units	0.01 pH	T63<1s, T90<2s, T95<3s	pH	Std. Methods 4500-H⁺ / EPA 150.2
ORP⁵	±5 mV	±1,400 mV	0.1 mV	T63<3s, T90<15s, T95<30s	mV	Std. Methods 2580
Conductivity⁶	±0.5% of reading plus 1 µS/cm from 5 to 80,000 µS/cm; ±1.0% of reading from 80,000 to 200,000 µS/cm	5 to 200,000 µS/cm	0.1 µS/cm	T63<1s, T90<3s, T95<5s	Actual conductivity (µS/cm, mS/cm); Specific conductivity (µS/cm, mS/cm); Salinity (PSU); Total dissolved solids (ppt, ppm); Resistivity (Ohm-cm); Density (g/cm³)	Std. Methods 2510/ EPA 120.1
Rugged Dissolved Oxygen (RDO) Classic and Fast Cap	±0.1 mg/L ±0.2 mg/L ±10% of reading	0 to 8 mg/L 8 to 20 mg/L 20 to 50 mg/L	0.05 mg/L	Classic: T63<15s, T90<45s, T95<60s Fast: T63<3s, T90<30s, T95<45s	mg/L, %saturation, ppm	EPA-approved In-Situ Methods: 1002-B-2009, 1003-B-2009, 1004-B-2009
Turbidity	±2% or 2 NTU or FNU	0 to 4,000 NTU	0.01 NTU (0 to 1,000); 0.1 NTU (1,000 to 4,000)	T63<1s, T90<1s, T95<1s	Turbidity: NTU, FNU Total Suspended Solids: ppt	ISO 7027
Pressure⁷ (Optional)	Typical ±0.1% full scale (FS) or better @15°C; ±0.3% FS max. from 0-50°C	Non-Vented or Vented 9.0 m (30 ft) (Burst: 27 m; 90 ft) 30 m (100 ft) (Burst: 40 m; 130 ft) 76 m (250 ft) (Burst: 107 m; 350 ft) 200 m (650 ft) (Burst: 229 m; 750 ft)	0.01% full scale	T63<1s, T90<1s, T95<1s	Pressure: psi, kPa, bar, mbar, inHg, mmHg; Level: in, ft, mm, cm, m	Piezoresistive; Ceramic
Warranty¹	2 year - Sonde, cables, sensors (excluding pH/ORP); 1 year - pH/ORP sensor					
Notes	1) > 100,000 data records for 30 parameters; > 3 years at 15 min. interval for 30 parameters. 2) Data record = date/time plus 6 parameters logged. 3) Logging and wiping all sensors at 15 min. interval. Battery life dependent on site conditions. 4) Sensor only, when transferring from air to ambient water temperature. 5) Response time at thermal equilibrium. 6) Accuracy at calibration points. 7) Vented measurements are derived using barometric pressure sensor compensation. 8) Extended warranty option for sonde only (1-3 year extension for up to 5 years total). Specifications are subject to change without notice. Android is a trademark of Google Inc. Bluetooth is a registered trademark of Bluetooth SIG, Inc. Delrin and Tefzel are trademarks of E.I. du Pont de Nemours & Co. Santoprene is a trademark of EssarMobil. Inconel is a trademark of Special Metals Corporation. Viton is a trademark of DuPont Performance Elastomers L.L.C. NIST is a registered trademark of the National Institute of Standards and Technology.					



Low-Flow Sampling System (left)

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.

