The TROLL® 9500 water quality instrument simplifies multiparameter monitoring. The TROLL® 9500 is a powerful, portable unit that houses up to nine water quality sensors, internal power, and optional data logging capabilities.

**Lower total cost of ownership**
- Save time and money with automated low-flow sampling, field-replaceable sensors, long-lasting internal power, connection to TROLL® Link telemetry systems for remote data management, and more.
- Reduce maintenance and site visits with the field-proven RDO® sensor.

**Higher reliability**
- Corrosion-resistant housing suitable for fresh, waste, and marine waters
- Field-replaceable sensors for easy maintenance and calibration
- Free technical support 24 hours a day, 7 days a week

**Proven accuracy**
- A factory report, using NIST®-traceable standards where applicable, is included with each unit.
- Rigorous, independent third-party validation proves the In-Situ® RDO performs to its specifications over long-term deployments.

**Easy operation**
- Innovations like Quick Cal check solutions, Twist-Lock cable connectors, and user-friendly software make your job easier.

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**Available Models**

**LTS:** LTS stands for “Level, Temperature, and one additional Sensor” such as conductivity, pH, or optical dissolved oxygen (RDO). Includes internal data logging. Use for coastal applications or to measure groundwater quality over time.

**PROFILER:** Ideal for water quality sampling or profiling. Allows for any of the key water parameters such as pH, ORP, DO, conductivity/salinity, temperature, or depth. Memory is not included, but data can be logged to a RuggedReader® or a PC.

**PROFILER XP:** Offers the same features as the Profiler unit, but with the option to use XP or “Extended Parameter” sensors, such as turbidity, ammonium, nitrate, and chloride.

**PROFESSIONAL:** Offers the highest value for most applications. Supports the key parameters similar to the Profiler, and includes internal data logging capabilities.

**PROFESSIONAL XP:** The most capable TROLL 9500 instrument offers the same features as the Professional unit, but with the option to use XP or “Extended Parameter” sensors, such as turbidity, ammonium, nitrate, and chloride.

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**Applications**

- Environmental monitoring
- Estuary evaluations
- Long-term deployments
- Low-flow sampling
- Mine water quality analysis
- Remediation projects
- Spot checking
- Stormwater outfall studies
- Surface water testing
- TMDL assessments
- Vertical profiling
Specifications

### Versions

<table>
<thead>
<tr>
<th>Versions</th>
<th>Application</th>
<th>Available sensor ports¹</th>
<th>Accepts XP sensors</th>
<th>Internal data logging</th>
<th>Logs data with RuggedReader²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profiler</td>
<td>Profiling, spot checking</td>
<td>4</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Profiler XP</td>
<td>Profiling, spot checking</td>
<td>4</td>
<td>Yes</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Professional</td>
<td>Long-term monitoring and/or profiling</td>
<td>4</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Professional XP</td>
<td>Long-term monitoring and/or profiling</td>
<td>4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LTS</td>
<td>Long-term monitoring</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

### General

- **Dimensions:** 47mm (1.85 in) OD X 47.3cm (18.6 in); with RDO sensor adapter: 88.4 mm (3.5 in) OD, 20.3cm (8.0 in) long
- **Weight:** 1.9 kg (4.2 lbs)
- **Wetted materials:** PVC, 316L stainless steel, Acetal, Viton®, nylon, Tefzel® or polyurethane (cable)
- **Water tightness rating:** IP66 with all sensors and cable attached; Battery compartment: IP67 w/o the battery cover or cable attached
- **Output options:** SDI-12 (optional with SDI-12 adapter), ASCII streaming mode or binary command
- **Internal power:** 2 internal user-replaceable D batteries (alkaline or high-power lithium)

### Standard Sensors

- **Temperature:** ±0.1°C, ±0.05°F/S
  - Level, Depth, Pressure: 0–15 psi, 0–30 psi, 0–100 psi, 0–300 psi
  - Depth Rating: 11m / 35 ft, 21 m / 69 ft, 70 m / 231 ft, 210 m / 692 ft
  - Response Time (T90): Silicon strain gauge
- **Barometric Pressure:** ±0.3% FS, ±0.1% FS
  - Meets highest rating: <30 sec per 30m (100 ft cable)
- **pH (single or pH/ORP combo):** ±0.1 pH units, ±4.0 mV
  - Meets highest rating: <15 sec, pH 7 to pH 4
- **Dissolved Oxygen:** ±0.1 mg/L, ±0.2 mg/L, ±0.2 mg/L
  - Meets highest rating: 30 sec, 30 sec
- **ORP (pH/ORP combo):** ±0.2 mg/L, ±8–20 mg/L
  - Meets highest rating: 30 sec, 30 sec
- **Clark electrode:** ±0.2 mg/L, ±0–20 mg/L, ±0–200% saturation
  - Meets highest rating: 1-mil membrane: 1–2 min @25°C, 2-mil membrane: 90 sec–3 min

### Conductivity

- **Low:** ±0.5% or 2µS/cm, ±0.5% or 2µS/cm
  - Meets highest rating: Instantaneous, Instantaneous
- **High:** ±0.5% or 2µS/cm, ±0.5% or 2µS/cm
  - Meets highest rating: Instantaneous, Instantaneous

### Extended Parameter (XP) Sensors

- **Turbidity:** ±5% or 2 NTU/FNU, ±5% or 2 NTU/FNU
  - Meets highest rating: Instantaneous (5 sec for first reading)
- **Nitrate (NO₃⁻):** ±10%, ±10%
  - Meets highest rating: 60 sec (7164), 1.1 to 14 ppm N
- **Ammonium (NH₄⁺):** ±10%, ±10%
  - Meets highest rating: 60 sec (7164), 1.1 to 14 ppm N
- **Chloride (Cl⁻):** ±15%, ±15%
  - Meets highest rating: 60 sec (7164), 1.1 to 14 ppm N

### Logging

- **Data logging:** 16 programmable tests (defined, scheduled to run, or stored)
- **Memory:** 4 MB (1,000,000 individual readings)
- **SDI-12:** Optional with SDI-12 adapter

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¹Available water quality sensor ports. TROLL 9500 LTS version supports level, temperature, and one water quality sensor.
²No anode or cathode to scrub or clean
³Full operating range 3 µS/cm – 60,000 µS/cm
⁴Full operating range 70 µS/cm – 200,000 µS/cm

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Warranty

The TROLL 9500 instrument and all sensors (excluding RDO and ISE sensors) come with a 1-year warranty. Warranty on the RDO sensor is 3 years. Warranty on RDO sensor caps is 2 years. Warranty on ISE sensors is 90 days. Warranty on RuggedCable® systems is 2 years.

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CALL TO PURCHASE

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