



## *Aqua TROLL 500/600 Nitrate Sensor Overview*

The In-Situ nitrate sensor measures nitrate levels in natural water, surface water, groundwater, produced water and aquaculture applications.

### *Getting Started*

#### **1** *Condition the sensor.*



Before calibration and deployment, condition the nitrate sensor according to the instructions below. Repeat conditioning procedure between deployments.



Soak sensor for a minimum of two hours in 140 mg/L nitrate as N standard or the highest standard you plan to use during calibration.



Soak overnight for the best long-term results. Rinse thoroughly with deionized water prior to calibration.

#### **2** *Install sensor.*



Remove restrictor from the instrument.



Remove sensor port plug if installed. Do not twist.



Lubricate o-ring at bottom of sensor.



Install sensor. Do not twist.



Place instrument in calibration mode.

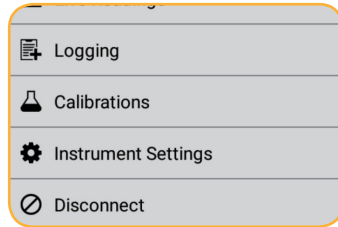
### 3 Calibrate and deploy.



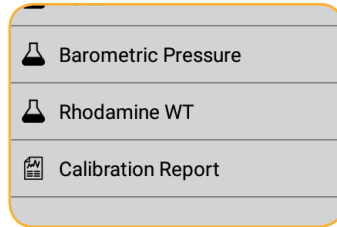
For detailed calibration instructions, see the instruction manual or quick start guide for your In-Situ instrument.



Connect to the instrument with VuSitu or Win-Situ software.



Select Calibrations from the menu.



Choose the Nitrate option and follow the instructions.



Flip the restrictor into deployment mode after calibration

## Replacing the Reference Junction Filling Solution



Remove sensor from sonde and unscrew reference junction.



Discard old solution.



Lightly shake the bottle of reference filling solution and turn upside down to mix.



Insert the fill tube into the bottom of reservoir.



Squeeze a steady stream of solution into the reservoir while slowly pulling out the tube.



Overfill slightly. Reinstall reference junction cap and tighten until it touches sensor body.

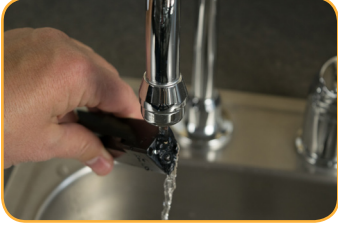


Turn the cap 90° more (one quarter of a turn) to secure.



Wipe away excess solution. Soak in tap water for 15 minutes and calibrate.

## Cleaning and Storing the Sensor



Gently rinse with cold water to clean.



To remove crystalline deposits, clean with warm water and soap, or soak sensor in 5% HCl solution for 10 to 30 minutes.



**Short-term storage** (less than two days): Store the sensor in conditioning solution. **Long-term storage:** Store dry. Install rubber boot to protect sensor.



Leave reference solution in the sensor during storage.