



Aqua TROLL 500/600 Ammonium Sensor Overview

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



You must have a **Temperature** or **Conductivity/Temperature** sensor installed to use the Ammonium sensor. To calculate ammonia, the instrument requires a **Conductivity/Temperature** sensor and a **pH** sensor.

Getting Started (4 steps)

1 *Replace the reference filling solution.*



Before calibration and deployment, condition the ammonium sensor and replace the filling solution according to the instructions below. Repeat conditioning procedure between deployments.



Remove sensor from sonde and unscrew reference junction.



Don't dump solution down the drain. Pour it onto a paper towel and discard.



Lightly shake the bottle of reference filling solution 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.

2 Condition the sensor.



Soak sensor for a minimum of two hours in 140 mg/L ammonium 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.

3 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.

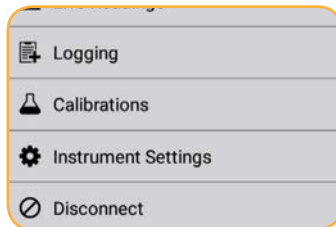


Place restrictor in calibration mode.

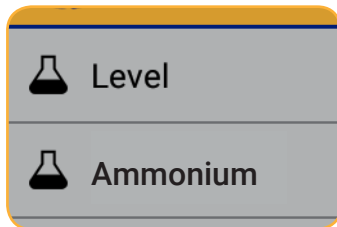
4 Calibrate and deploy.



Connect to the instrument with VuSitu.



Select **Calibrations** from the menu.



Choose the **Ammonium** option and follow the instructions.



Flip the restrictor into deployment mode after calibration



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

Cleaning and Storing the Sensor



Salt crystals may form on the sensor during storage. These are normal and will not interfere with sensor performance.



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.