Engineering Specification

Hydra Ammonium Sensor

1. The sensor shall measure the concentration of dissolved ammonium as nitrogen (NH_4^+N) in water.

2. The sensor shall use Ion Selective Electrode technology for the ammonium measurement, and Potassium Ion electrode, pH electrode, and temperature measurements for compensation and interferences.

3. The sensor has contain all functionality in a single sensor body that includes: ammonium electrode, potassium electrode, pH electrode, temperature RTD, and integral spray head cleaner.

4. The sensor housing body material shall be PVC with a removable electrode guard for easy maintenance.

5. The integral spray head cleaner shall allow in situ cleaning with pressurized water or air.

6. The sensor shall allow field replacement of each electrode cartridge individually lowering the overall cost of maintenance.

7. The sensor shall internal signal conditioning for amplified signals for up to 200 meters between sensor and analyzer.

8. The sensor body shall have internal blue LED's visible through the clear sensor body to indicate that the sensor is powered and connected to the analyzer.

9. The sensor shall measure a specific ion, have temperature range of 0^oC to 50^oC (32^oF to 122^oF).

10. The sensor shall be Electro-Chemical Devices HYDRA Ammonium (NH4-N) Sensor, Part No. 1290030-1 (Standard), 1290030-2 (Optional with no Potassium Compensation).