Engineering Specification
Hydra Series Ammonium Analyzer

1. The Ammonium Analyzer/Controller shall be a microprocessor-based instrument suitable for multiple measurement parameters of Ammonium, pH, Potassium and Temperature.

2. The Ammonium Analyzer/Controller shall have automatic pH, Potassium and temperature compensation for the ammonium measurement.

3. The Ammonium Analyzer/Controller display shall be menu driven 2.5" x 1.75" backlit LCD with the main menu displaying the process identity, process value and engineering units, percent output, and temperature for each channel.

4. The Ammonium Analyzer/Controller shall have outputs of 4-20 mA, linear and expandable. Up to a maximum of 4 outputs and 2 PID outputs. Optional relays will include up to (8) SPDT, 230 VDC/5A or 30 VDC/5A resistive maximum.

5. The Ammonium Analyzer/Controller shall have configurable setup mode with password protection for parameter graph, relays, 8 internal clocks and timers (one shot or periodic), 4 current outputs (4-20mA) & 2 PID current outputs, logical AND/OR gates.

6. The Ammonium Analyzer/Controller shall be powered by 110/220 VAC @ 50-60 Hz or optional +24 VDC.

7. The Ammonium Analyzer/Controller shall have a operating temperature range of -20°C to 70°C (-4°F to 158°C).

8. All Ammonium Analyzer/Controller functions, parts, and content (other than the sensors) shall be housed in a single NEMA 4X, weatherproof, ½ DIN, polycarbonate enclosure. Dimensions: (L x W x D) 5.7"x 5.7" x 7.0" (14.4 cm x 14.4 cm x 17.8 cm). The Ammonium Analyzer / Controller shall be capable of wall mount, panel mount, or pipe mount.

9. The Ammonium Analyzer/Controller shall be Electro-Chemical Devices Model Hydra C22 NH4-N Analyzer .