YSI Digital AmmoLyte® Ammonium/Potassium Sensor for the IQ SensorNet System

The AmmoLyte® is a rugged, online probe for measuring temperature, ammonium and potassium concentrations with Ion Selective Electrodes (ISEs) using reference electrodes for the most accurate wastewater process monitoring.

The AmmoLyte® probe is used within the IQ SensorNet system and can therefore be networked with other probes and parameters for a complete process monitoring and control system. It can measure and display the compensated ammonium concentration with optional display of potassium. There is a constant potential with the measuring electrode and the reference electrode. This tension is read as the measured value and prevents interferences.

The AmmoLyte® is the ideal probe for quantitative measurement of ammonium in a wastewater treatment plant. The efficient control of ammonium in wastewater relies on the ability to take measurements directly in the process. This direct ISE measuring technology is possible with the AmmoLyte® sensor, enabling optimization of a plant in respect to process efficiency and energy consumption.

- Single- or dual- measurement of ammonium and potassium; measurement of potassium provides automatic and dynamic compensation
- Individual, user-replaceable electrodes and reference
- AmmoLyte® reference system is very stable over long periods of time
- Analog or digital output of measurement with output modules (sold separately) for recording and control purposes
- Electrodes are recognized automatically
- Optional display of potassium
- 2-year warranty on the probe, 1-year on electrodes

Parameters:
- Ammonium
- Potassium
- Temperature

The AmmoLyte® ISE sensor provides continuous data to help with operational improvement decisions.
## AmmoLyt® Plus 700 IQ Technical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measuring Range</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH₄⁻N</td>
<td>0.1 to 100.0 mg/L</td>
<td>0.1 mg/L</td>
</tr>
<tr>
<td></td>
<td>1 to 1000 mg/L</td>
<td>1 mg/L</td>
</tr>
<tr>
<td>NH₄</td>
<td>0.1 to 129.0 mg/L</td>
<td>0.1 mg/L</td>
</tr>
<tr>
<td></td>
<td>1 to 1290 mg/L</td>
<td>1 mg/L</td>
</tr>
<tr>
<td>mV (Ammonium)</td>
<td>-2000 to 2000 mV</td>
<td>1 mV</td>
</tr>
<tr>
<td>K</td>
<td>1 to 1000 mg/L</td>
<td>1 mg/L</td>
</tr>
<tr>
<td>mV (Potassium)</td>
<td>-2000 to +2000 mV</td>
<td>1 mV</td>
</tr>
<tr>
<td>Temperature</td>
<td>-5 to 60 °C (23 to 140 °F)</td>
<td>0.1 K</td>
</tr>
</tbody>
</table>

### Operating & Compensation Range
- Temperature: 0 to 40 °C (32 to 104 °F)
- Storage Temperature: 0 to 40 °C (32 to 104 °F)

### Warranty
- 2 years on probe, 12 months on electrode
- 4 to 12 for Ammonium

### pH Range
- 4 to 12

### Dimensions
- Length 392 mm (15.43 in); diameter 40 mm (1.57 in); not including protective hood; weight (without sensor cable) ~ 670 g (1.5 lbs)

### Certifications
- CE, cETLus, EN, UL, CAN/CSA

### Protection Class
- Sensor with SACIQ cable connected: IP68

### Pressure Resistance
- 0.2 bar (2.9 psi); maximum immersion depth = 2 meters

### Electrical
- Power Consumption: 0.2 W, Two wire shielded IQ cable provides power and communication

### Materials
- Housing: Stainless Steel 1.4571, POM (for electrode material see product manual)

Visit YSI.com/IQ for additional information on the entire IQ SensorNet system.

### AmmoLyt® Plus 700 IQ Sensor Ordering Information

107 070Y - AmmoLyt® Plus 700 IQ. Robust digital ammonium probe for the ion-selective measurement (in-situ) of ammonium and potassium, for use with the IQ SensorNet system. Order electrodes separately.

107 071YK - AmmoLyt® Plus 700 IQ. Robust digital ammonium probe for the ion-selective measurement (in-situ) of ammonium and potassium, for use with the IQ SensorNet system. VARiON® Ref and VARiON® Plus NH₄ included. VARiON Plus® K electrode sold separately.

107 072YK - AmmoLyt® Plus 700 IQ. Robust digital ammonium probe for the ion-selective measurement (in-situ) of ammonium and potassium, for use with the IQ SensorNet system. VARiON® Ref and VARiON® Plus NH₄ and VARiON Plus® K included.

107 042Y - VARiON® Ref. Reference electrode for mounting into VARiON® Plus 700 IQ, NitraLyt® Plus, AmmoLyt® Plus probe.

107 044Y - VARiON Plus NH₄. Ammonium electrode for VARiON Plus 700 IQ and AmmoLyt Plus, measuring range: 0.1 - 1000 mg/l NH₄-N.

107 046Y - VARiON Plus K. Potassium electrode for VARiON Plus 700 IQ and for AmmoLyt Plus, measuring range: 1 - 1000 mg/l K+. 