



## Intellical ISENH4181 Ammonium ( $\text{NH}_4^+$ ) Ion Selective Electrode (ISE), 1 m cable

**Product #:** ISENH418101  
**ZAR Price:** Contact Hach  
**Ships within 1 week**

Intellical ISENH4181 is a digital, combination, ammonium ion selective electrode (ISE) with a non-refillable gel Dritek reference with a double junction, ceramic porous pin and porous PTFE annular ring, and built-in temperature sensor. The electrode measures ammonium concentration in water samples. The laboratory version of this ISE is shockproof with its Epoxy plastic body. The Intellical ISENH4181 probe is available with a 1 or 3 meter cable and is intended for laboratory use. The ISENH4181 is ideal for measuring ammonium concentrations in wastewater, drinking water and general water quality applications.

### Utilizes a unique solid-state sensor technology that eliminates costly membrane replacements.

Traditional PVC-membrane ISEs require membrane replacement every 2-3 months. The Intellical ISENH4181 Ammonium ISE's unique solid-state sensor technology eliminates the need for frequent membrane replacement by using a solid gel ion exchange behind the ion-selective membrane versus the liquid ion exchange used in most ISEs. This design allows users to get up to 2 years of life from their ISE without membrane replacement – saving the time and costly expense of frequently exchanging membranes.

### Requires virtually no maintenance

The solid-state sensor design allows for DRY storage of the ISE without a shelf life. Also, the probe does not require the electrolyte to be refilled.

### Fast, stable, and accurate results

Intellical digital probes lock on the result when the measurement is stable, removing the guesswork in having a moving number. Additionally, the probe's large annular reference junction provides maximum surface area between sample and reference electrolyte for fast measurement stability. And the solid-state sensor design doesn't allow the membrane to flex or undergo surface area changes, leading to more stability in results over a variety of samples.

### Ultimate traceability in measurement history

Stored time and date stamp for each measurement, operator and sample ID, calibration history, parameter, and probe serial number

### Can be moved between meters without the need to re-calibrate or re-enter measurement settings

Ideal for a multi-user environment with multiple HQD series Laboratory and Portable meters

---

## Specifications

Accuracy:	±0.02 mV or 0.05%, whichever is greater
Cable Length:	1 m
Electrode Type:	Standard
ISA Required:	Ammonium ISA (#2980699)
Junction:	Double Junction (ceramic Porous Pin and annular porous PTFE)
Kit?:	No
Length:	175 mm
Method Type:	Laboratory: Non-Refillable Dritek Gel Reference Element

Parameter:	Ammonium
Product Kit:	Model: ISENH4181
	Accessories Included: None
Range:	0.018 mg/L (10 <sup>-6</sup> M) - 9 g/L (0.5 M) NH <sub>4</sub> -N
Reference system:	Ag/AgCl
Resolution:	Selectable up to 4 significant digits
Sample Volume:	15 mL
Sensor material:	Epoxy
Sensor Type :	Solid-state PVC membrane
Special Features:	Dry storage & fast response time. No replacement membranes.
Temperature Accuracy:	±0.3 °C
Temperature Range:	0 - 50 °C
Temperature resolution:	0.1 °C
Test requirements:	Parameter Needed: Ammonium
	Minimum Sample Depth (mm): 26
Thermistor :	ATC
Warranty:	6 months
Weight:	0.1 kg
What's included?:	Intellical ISENH4181 combination Ammonium ISE, 1 m cable (ISENH418101), Test certificate, and Basic User Manual.

---

## What's included?

Intellical ISENH4181 combination Ammonium ISE, 1 m cable (ISENH418101), Test certificate, and Basic User Manual.

---

## Required Accessories

- Ammonium Ionic Strength Adjustor (ISA) Pillows, pk/100 (Item 2980699)