



Intellical ISENH4181 Ammonium (NH⁺) Ion Selective Electrode (ISE), 3 m cable

Product #:

AED Price: Available ISENH418103

Contact Hach



Intellical ISENH4181 is a digital, combination, ammonium ion selective electrode (ISE) with a 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 shockproff 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 solidstate 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:	$\pm 0.02 \text{ mV}$ or 0.05%, whichever is greater
Cable length:	3 m
Electrode type:	Non-Refillable Dritek Gel Reference Element
ISA required:	Ammonium ISA
	(#2980699)
Junction:	(#2980699) Double Junction (ceramic Porous Pin and annular porous PTFE)
Junction: Kit?:	
	Double Junction (ceramic Porous Pin and annular porous PTFE)

Measuring range:	0.018 mg/L (10 ⁻⁶ M) - 9 g/L (0.5 M) NH ₄ -N
Method Type:	Field: Non-Refillable Dritek Gel Reference Element
Parameter:	Ammonium
Product Kit:	Model: ISENH4181
	Accessories Included: None
Reference system:	Ag/AgCl
Resolution:	Selectable up to 4 significant digits
Sample depth:	25.4 mm
Sample volume:	15 mL
Sensor material:	Ероху
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:	Integrated
Warranty:	6 months
Weight:	0.15 kg
What's included?:	Intellical ISENH4181 combination Ammonium ISE, 3 m cable (ISENH418101), Test certificate, and Basic User Manual.

What's included?

Intellical ISENH4181 combination Ammonium ISE, 3 m cable (ISENH418101), Test certificate, and Basic User Manual.