



Be Right™



## Intellical ISENO3181 Nitrate (NO<sub>3</sub><sup>-</sup>) Ion Selective Electrode (ISE), 1 m cable

<b>Product #:</b>	<b>ISENO318101</b>
ZAR Price:	Contact Hach
Available	

Intellical ISENO3181 is a digital, combination, Nitrate 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 Nitrate concentration in water samples. The laboratory version of this ISE is shockproof with its Epoxy plastic body. The Intellical ISENO3181 probe is available with a 1 or 3 meter cable and is intended for laboratory use. The ISENO3181's solid-state sensor design eliminates membrane replacement and allows for dry storage of the ISE. The ISENO3181 is ideal for measuring nitrate 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 ISENO3181 Nitrate 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:	Non-Refillable Dritek Gel Reference Element
ISA Required:	Nitrate ISA  (#2984799)
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:	Nitrate
Product Kit:	Model: ISENO3181
	Accessories Included: None
Range:	0.1 mg/L ( $7 \times 10^{-6}$ M) - 14 g/L (1 M) NO <sub>3</sub> -N
Reference system:	Ag/AgCl
Resolution:	Selectable up to 4 significant digits
Sample Volume:	25 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: Nitrate
	Minimum Sample Depth (mm): 26
Thermistor :	ATC
Warranty:	6 months
Weight:	0.1 kg
What's included?:	Intellical ISENO3181 combination Nitrate ISE, 1 m cable (ISENO318101), Test certificate, and Basic User Manual.

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## Required Accessories

- Nitrate Ionic Strength Adjustor Powder Pillows - Intellical, pk/100 (Item 2984799)