



# IntelliCAL™ ISENO3181 Nitrate Ion Selective Electrode (ISE), 1 meter cable

Product #: ISENO318101

IntelliCAL<sup>TM</sup> ISENO3181 is a digital, combination nitrate ion selective electrode (ISE) with a non-refillable, double junction reference and built-in temperature sensor. The IntelliCAL ISENO3181 probe is available with a 1 or 3 meter cable and is intended for laboratory use. The ISENO3181 is ideal for measuring nitrate concentrations in wastewater, drinking water and general water quality applications. The ISENO3181's solid-state sensor design eliminates membrane replacement and allows for dry storage of the ISE.

## 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:	$\pm 0.02$ mV or 0.05%, whichever is greater

Cable Length: 1 m

Connector: HQD specific

Diameter: 12 mm

Dimensions (D x L): 12 mm x 220 mm

Filling Solution: Non-refillable driTEK gel

ISA Required: 2984799

Junction: Porous PTFE Annular Ring

Length: 220 mm

Material: Sensor Body: Epoxy

Parameter: Nitrate
Probe Type: Standard

Reference Type: Ag/AgCl

Resolution: 2, 3, 4 significant digits selectable

Sensor Type: Solid-state PVC membrane

Special Feature: Dry storage & fast response time. No replacement membranes.

Temperature Range: 0 to 50 °C

# What's in the box?

Includes: IntelliCAL ISENO3181 combination Nitrate ISE with integrated temperature sensor, calibration certificate, and Basic User Manual.