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YSI Digital NitraLyt® Nitrate/Chloride Sensor for the IQ SensorNet System

The NitraLyt® is a rugged, online probe for measuring temperature, nitrate and chloride concentrations with Ion Selective Electrodes (ISEs) for wastewater process monitoring.

The NitraLyt® probe is used within the IQ SensorNet system and can be networked with other probes and parameters for a complete process monitoring and control system. It measures nitrate with the option to also measure chloride for compensating the nitrate measurement and reporting.

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

Parameters:

Nitrate
Chloride
Temperature

- Single- or dual- measurement of nitrate and chloride; measurement of chloride provides automatic and dynamic compensation
- Individual, user-replaceable electrodes and reference
- NitraLyt® 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 chloride
- 2-year warranty on the probe, 1-year on electrodes

The NitraLyt® ISE sensor provides continuous data to help with operational improvement decisions.



NitraLyt® Plus 700 IQ Technical Specifications

Parameter	Measuring Range	Resolution	
NO ₃ -N	0.1 to 100.0 mg/L	0.1 mg/L	
	1 to 1000 mg/L	1 mg/L	
NO ₃	0.5 to 450.0 mg/L	0.5 mg/L	
	5 to 4500 mg/L	5 mg/L	
Cl	1 to 1000 mg/L	1 mg/L	
mV	-2000 to +2000 mV	1 mV	
Temperature	-5 to 60 °C (23 to 140 °F)	0.1 K	Accuracy ± 0.5 K
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		
pH range	4 to 12		
Dimensions	Length 392 mm (15.43 in); diameter 40 mm (1.57 in) - not including protection 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)		

NitraLyt® Plus 700 Electrode Specifications

Electrode	NO ₃	Cl, Ref
Measured at 20° C (68° F) and concentration change of..	5 to 50mg/L	10 to 100 mg/L
Response time T ₉₀	< 3 min	< 3 min

NitraLyt® Plus 700 IQ Sensor Ordering Information

107 080Y	NitraLyt® Plus 700 IQ. Robust digital nitrate probe for the ion-selective measurement (in-situ) of nitrate and chloride, for use with the IQ SensorNet system. Order electrodes separately.
107 081YK	NitraLyt® Plus 700 IQ. Robust digital nitrate probe for the ion-selective measurement (in-situ) of nitrate and chloride, for use with the IQ SensorNet system. VARIION® Ref and VARIION® Plus NO ₃ included. VARIION Plus® Cl electrode sold separately.
107 082YK	NitraLyt® Plus 700 IQ. Robust digital nitrate probe for the ion-selective measurement (in-situ) of nitrate and chloride, for use with the IQ SensorNet system. VARIION® Ref and VARIION® Plus NO ₃ and VARIION Plus® Cl included.
107 042Y	VARIION® Ref. Reference electrode for mounting into VARIION® Plus 700 IQ, NitraLyt® Plus, AmmoLyt® Plus probe.
107 045Y	VARIION Plus NO ₃ . Nitrate electrode for VARIION Plus 700 IQ and NitraLyt Plus, measuring range: 0.1 - 1000 mg/l NO ₃ -N.
107 047Y	VARIION Plus Cl. Chloride electrode for VARIION Plus 700 IQ and for NitraLyt Plus, measuring range: 1 - 1000 mg/l Cl-.

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

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