Photonic Measurements

Nitrates Probe

Optimizing Denitrification with Nitrate Measurement

Accurate nitrate measurement is essential for efficient water treatment processes. By providing fast, responsive, and cost-effective monitoring, our Nitrates probe helps optimize denitrification, save time, and reduce chemical costs, ensuring the highest standards of water quality.

Applications

Drinking Water

- Source water monitoring and alarming

Waste Water

- Final effluent monitoring
- Inlet monitoring
- Aeration control and optimization
- Planning and optimization of denitrification processes

Benefits

Fast, Accurate Results

- Automated measurement, no grab samples
- Fast response to change in water

Operational Efficiencies

- Optimization of chemical dosing
- Heightened efficiency of digestor
- No recurring operational spend
- Automate manual processes

Compliance

- Easy calibration of probes
- Intuitive user interface with 4-button navigation

Ease of Install & Maintenance

- No moving parts – minimal maintenance
- Long life LED light source
- Intuitive calibration and setup
- Easy installation and placement
- Works with PM Iris Controller
- Modbus Interface for third-party controllers
- Simple cable connection

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Specifications

Range	0-20 mg/L Nitrates
Accuracy	±1.0%
Repeatability	±0.5%
Path Length	1, 2, 5, 10, 20, or 50 mm
Sampling Frequency	10 Seconds
Material	Stainless Steel 316
Compensation	NOM, Particle/Turbidity
Light Source	UV LED
Dimensions	Probe: 39 mm diameter, Height 150 mm + path length
Operating Conditions	1 to 45°C, max 80% relative humidity (non-condensing)

Storage Conditions	-20 to 60°C, max 80% relative humidity (non-condensing)
Enclosure Rating	Probe IP68
Interfaces	RS485, MODBUS
Warranty	1 year
Cleaning System	Optional jet wash cleanse unit
Conformity Safety	EN61010
Conformity EMC	EN61326
Cable Length	Standard 10 m (alternatives available)
Supply Voltage	12 volts—24 volts DC
Measurements	Nitrates