

High accuracy in-situ nitrate measurement

- **Tipo de producto**
  Instalación fija
- **Parámetros medidos**
  Nitrato
- **Puntos destacados**
  Alta precisión, sin productos químicos, medición de nitratos in situ
- **Interface**
  SDI-12, RS-232

Con una óptica mejorada y muestreo inteligente adaptativo incorporado, el SUNA V2 mide la concentración de nitratos con una precisión y una estabilidad líderes en el sector y en las más diversas condiciones ambientales. La amplia gama de prestaciones opcionales disponibles para el SUNA V2 hace de este sensor una solución eficaz y rentable para la medición habitual de la concentración de nitratos.

Mechanical	SUNA with Wiper
Material	Titanium
Rated Depth	100 m
Weight (in air)	4.8 kg
Pathlength	10 mm or 5 mm
Length	588 mm/ 583 mm
Diameter	63 mm
Temp Range, Operation	-2 - 35 °C
Temp Range, Storage	-20 - 50 °C

We reserve the right to make technical changes and improvements without notice. V-13/03/2024
OTT Hydromet GmbH, Germany

Datos técnicos

Sea-Bird Scientific SUNA Optical Nitrate Sensor

Electrical	
Input	8 - 18 VDC
Input, Sensor with Wiper	8 - 15 VDC
Current Draw, Operation	~ 625 mA at 12V
Current Draw, Standby	~ 20 mA at 12V
Light Source	UV Deuterium Lamp (900 hr lifetime)
Communication Interface	RS232; Analog 4 - 20 mA; (USB, SDI-12 optional)
Data Storage	2GB (optional)

Optical	
Spectral Range	190-370 nm
Pathlength	10 mm (5 mm optional)

Nitrate Measurement Accuracy

Concentration Range	10 mm pathlength
Calibration	Sensor Specific*
up to 14 mg N/L	0.028 mg N/L or 10%
up to 28 mg N/L	0.028 mg N/L or 15%
up to 42 mg N/L	0.028 mg N/L or 20%
up to 56 mg N/L	out of range
Calibration	Class Based**
up to 14 mg N/L	0.035 mg N/L or 20%
up to 28 mg N/L	0.035 mg N/L or 25%
up to 42 mg N/L	0.035 mg N/L or 30%
up to 56 mg N/L	out of range

Concentration Range	5 mm pathlenght
Calibration	Sensor Specific*
up to 14 mg N/L	0.056 mg N/L or 10%
up to 28 mg N/L	0.056 mg N/L or 15%
up to 42 mg N/L	0.056 mg N/L or 15%
up to 56 mg N/L	0.056 mg N/L or 15%
Calibration	Class Based**
up to 14 mg N/L	0.063 mg N/L or 20%
up to 28 mg N/L	0.063 mg N/L or 25%
up to 42 mg N/L	0.063 mg N/L or 25%
up to 56 mg N/L	0.063 mg N/L or 25%
* A sensor specific calibration uses extinction coefficients from the sensor itself	
** A class based calibration uses extinction coefficients that are the averager of many sensors	

Nitrate Measurement Precision

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Processing Configuration	Seawater or Freshwater with T-S Correction
Short-term precision (3 sigma)	0.004 mg N/L
Change ("drift") per hr of lamp time	<0.004 mg N/L
Processing Configuration	**Seawater (0-40PSU)**
Short-term precision (3 sigma)	0.034 mg N/L
Change ("drift") per hr of lamp time	<0.014 mg N/L

Limit of Detection and Limit of Quantification

Processing Configuration	Seawater or Freshwater with T-S Correction
Limit of Detection	0.004 mg N/L
Limit of Quantification	0.014 mg N/L

Processing Configuration	Seawater (0-40 PSU)
Limit of Detection	0.034 mg N/L
Limit of Quantification	0.112 mg N/L

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