

HIGH NITRATE /NITRITE PROBE

HNA SERIES



FEATURES & BENEFITS

- Affordable real-time nitrate (NO_3) and nitrite (NO_2) monitoring
- Ideal for monitoring high levels of nitrate and nitrite
- Multiple wavelength sensor uses patent-pending technology for superior measurement performance
- Robust submersible probe with titanium or stainless steel housing
- Operator friendly, low-maintenance UV and Visible LED design
- Reagent free optical measurements
- Simple to install and operate

MUNICIPAL DRINKING WATER
MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

WATER QUALITY
MONITORING
SOLUTIONS

REAL-TIME MONITORING SOLUTION

High Nitrate/Nitrite Probe

Real Tech's robust submersible High Nitrate/Nitrite Probe provides affordable real-time measurement of high levels of nitrate (NO_3) and nitrite (NO_2) in water or wastewater. The probe's rugged body is built to withstand harsh environments, with titanium or stainless steel options. Designed to meet the needs of many monitoring applications, the HNA series offers multiple path length selections for the desired measurement range.

Controllers and Accessories

Our innovative modular product platform ensures our clients gain the real-time water quality monitoring system that meets their specific demands and budget. With multiple controller and accessory options available such as automatic compressed air cleaning systems that lower maintenance while improving system performance, Real Tech provides a total solution for all of your unique water quality monitoring needs.

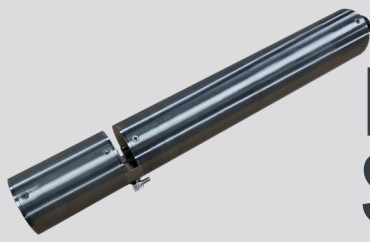
Liquid Ai Compatible

Our Liquid Ai data services complement our real-time water quality monitoring systems. Our Remote Monitoring platform is a powerful data management and visualization tool that enables access to data anywhere, anytime.

MEASUREMENT PRINCIPLE

Real Tech's High Nitrate/Nitrite Probe utilizes patent-pending technology to provide superior measurement performance across multiple wavelengths of light using UV and Visible LEDs. Many compounds absorb light in the UV-VIS spectrum, and how much the compounds absorb is directly proportional to their concentration. Compounds that may interfere with nitrate and nitrite measurement are compensated for using additional reference wavelengths. Real Tech's innovative High Nitrate/Nitrite Probe is advancing wastewater management.

REALTECH
INC.



HIGH NITRATE/NITRITE PROBE SPECIFICATIONS

CHARACTERISTIC	TECHNICAL DATA	
	HNA-X	HNA-S
Model	HNA-X	HNA-S
Path Length	1, 2, 4, 10 mm	
Parameters	Nitrate (NO ₃) and nitrite (NO ₂)	
Range	Depends on model selected. Refer to range chart.	
Accuracy	± 0.5% full scale	
Units	mg/L, ppm	
Sampling Time	10 seconds	
Calibration	Factory calibrated. Field adjustment of calibration is possible.	
Cleaning	Automatic compressed air or pressurized water cleaning with optional Probe Clean System	
Self-Diagnostics	Detection and diagnosis of internal system fault	
Alarms	Continuous detection of leaks, lamp output, humidity, temperature and electrical fault	
Humidity Control	Humidity sensor with desiccant pack	
Wavelengths	UV and visible light wavelengths	
Light Source	UV and VIS LED	
Electrical/Comm.	From controller	
Pressure Rating	15 PSI	
Operating Temp.	0 to 45°C (32 to 113°F)	
Housing Material	Titanium (Grade 2)	Stainless steel (SS 316)
Wetted Materials	Titanium, Epoxy, Sapphire, SS 316, Viton	Epoxy, Sapphire, SS 316, Viton
Weight	1.5kg (3.31lb)**	2.5kg (5.25lb)**
Ingress Protection Type	IPX8	
Dimensions	15" H x 2.0" Diameter	
Warranty	2-year limited warranty (Extended care packages available)	

* Technical Specifications are subject to change without notice.

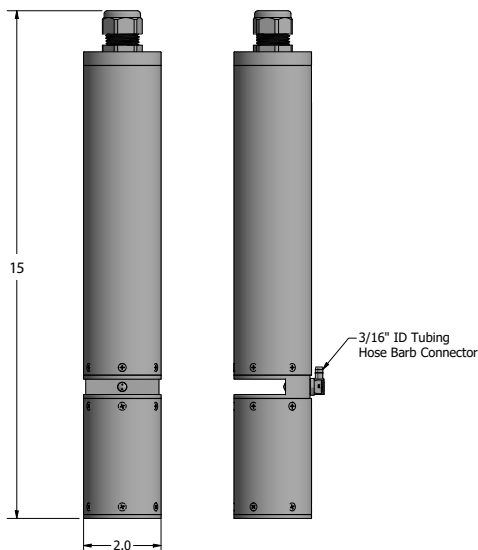
* Operating (water) temperature absolute maximum 55°C (131°F). Instrument performance reduced when operating outside recommended operating range. Contact Real Tech to verify application.

** Weight does not include cable. Cable weight: 0.70kg (1.55lb).

DIMENSIONS

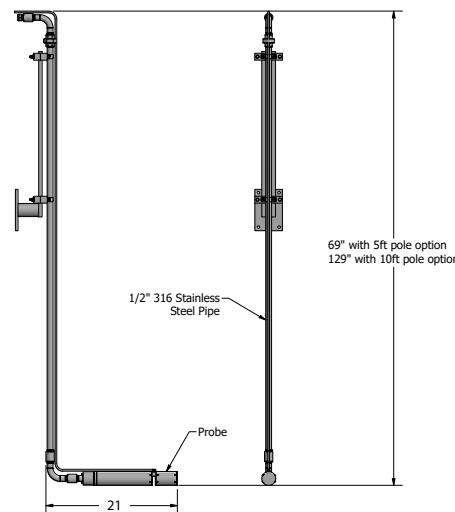
The high nitrate/nitrite probe is a submersible instrument installed directly in-situ using a pole mounting kit or chain mount.

DIMENSIONS FOR HIGH NITRATE/NITRITE PROBE



MOUNTING FOR HIGH NITRATE/NITRITE PROBE

Pole mount



Chain mount



PROBE MODELS & RANGE

Includes titanium (-X) or stainless steel (-S) high nitrate/nitrite probe sensor and 35 feet of communication cable. Controller, mounting kit and cleaning system sold separately.

MODEL#	PATH LENGTH	NO ₃ -N mg/L	NO ₃ mg/L	NO ₂ -N mg/L	NO ₂ mg/L
HNA-X2010 / HNA-S2010	1 mm	100 - 20,000	450 - 88,000	30 - 6000	100 - 20,000
HNA-X2020 / HNA-S2020	2 mm	50 - 10,000	225 - 44,000	15 - 3000	50 - 10,000
HNA-X2040 / HNA-S2040	4 mm	25 - 5000	110 - 22,000	7.5 - 1500	25 - 5000
HNA-X2100 / HNA-S2100	10 mm	10 - 2000	45 - 8800	3 - 600	10 - 2000

* Stated ranges are based on testing in deionized water. Site specific conditions, such as interfering substances in the water, may limit the measuring range and accuracy. Please contact Real Tech to confirm model selection.

CONTROLLERS

Controllers include proprietary inputs for Real Tech sensors and accessories.

PRODUCT #	NAME	DESCRIPTION
S-229005	Real Controller Lite	Wall mounted controller with 4-line x 20-character back lit LCD display. Includes modbus RTU (RS485)
S-169000	Real Controller	Wall mounted controller with 4-line x 20-character back lit LCD display. Includes modbus RTU (RS485), 1 channel of 4-20 mA out and digital I/O module
S-11TPC	Real Controller Pro	Wall mounted controller with 12.1" colour LCD touch panel PC interface (PC inside cabinet model). Includes Modbus TCP
S-11TPCD	Real Controller Pro	Wall mounted controller with 12.1" colour LCD touch panel PC interface (PC external on door model). Includes Modbus TCP

ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
S-228070	Probe Clean System	Cleaning valve module requires on-site compressed air or pressured water for automatic probe cleaning
S-228080	Compressed Air System	Compressor for air cleaning when compressed air not available on-site
S-219081	Probe Mounting Kit I	Provides secure mounting attachment for titanium or stainless steel probe to a tank wall or open channel wall. No pole included.
S-219082	Probe Mounting Kit II	Provides secure mounting attachment for titanium or stainless steel probe to a tank wall or open channel wall. 5' pole included.
S-219083	Probe Mounting Kit III	Provides secure mounting attachment for titanium or stainless steel probe to a tank wall or open channel wall. 10' pole included.
S-229085	Chain Mount	Stainless steel chain for mounting probe in open channel

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