

## [Product Description]

- IoT NO3 analyzer with RS-485 and Wi-Fi web interface, and it can monitor by remote and in-situ with mobile phone which is without meter and app.
- Automatic cleaning function (optional): Including Micro air pump, cleaning scheduling (adjustable), keeping the last reading (during auto cleaning), and stabilization time (adjustable), that is able to extend maintenance period easily.
- Smart calibration function: Switching protective cover to standard solution cover, and it calibrates with phone webpages.
- Smart AI function: calibration/auto-cleaning notification, self-judgment of stain and electrode degree of aging..etc.
- IP68 integrated design: The NO3 sensor can put into the application environment such as river/reservoir/tap water/ sewage..etc. Accurate and durable NO3 value can be provided to any meter or software in the world.

## [Features]

- Integrated design, and built-in IoT transmission and sensor.
- IP68 submerged type and corrosion resistant material which can put into water without protective sleeve.
- It can be operated by delivery of current, and all functions are built-in.
- Ultra-low power consumption, it is suitable for large-scale deployment of green energy IoTs.
- The high-strength isolated cable can be put to use directly, and the signal is stable.
- The NO3 sensor is equipped with temperature compensation and measurement (in accordance with NIEA W218.51C).
- The power and IoT communication are equipped with surge protection.
- With dual digital communication of RS-485 and Wi-Fi.
- Standard Modbus RTU and can connect to the global IoT.
- Wisdom design, storing parameter calibration, it can be installed directly on site after calibration.
- Operating with mobile web pages, it is convenient to on-site operation.
- Switching protective cover to standard solution cover on site, it is convenient for calibration.
- With 3-point calibration, and the calibration point can be set.
- During calibration and auto-cleaning, keep the last reading value to avoid misoperation, and it read the state at the same time (calibrating/auto-cleaning/stabilizing).
- The latest thrice calibration records (date/slope/calibration point) can be inquired.

**[Applications]** : Sewage, drinking water, Subterranean water, Aquaculture, River and lake detecting system.

**[Optional code]** NO3485- Code1 - Code2

Code 1	Function	Code 2	Line/Air duct length
N	No auto-cleaning	N	3M
A	Auto-cleaning (Including air pump, 5m air pipe, nozzle)	10	10M
A24	Auto-cleaning (24VDC Including air pump, 5m air pipe, nozzle)		

## [ Calibration bottle code]

Name of product	Code
Calibration bottle	Bottle



## [Technical Specifications]

- RS-485 Modbus RTU. The mobile phone operates with web page(no app).
- Data resolution:16 bit(0.001%F.S).
- Surge protection:8000VDC.
- Protection: polarity 、 overload 、 short circuit.
- Measurement principle: : In accordance with NIEA W218.51C. It takes advantages of the material of sensing front-end to sense NO3-N potential change. The potential difference converts to concentration, and correct various compensations. It provides an accurate data.
- Installation method: submerged 、 three way 、 intubation.

## [NO3 Specification]

NO3 Specification		Temperature Specification	
Measuring range	0 ~ 1000 mg/L (ppm)	Temperature principle	NTC30K
	Slope reading 70~130%	Measuring range	-10~120°C(ATC)
	Zero potential -50~50mv	Accuracy	±0.2°C
Accuracy	±5% reading ±0.5mg/L	Resolution	0.1°C
Resolution	0.01 mg/L	Reproducibility	0.1°C
Reproducibility	±3% reading ±0.5 mg/L	Other Specification	
Electrode withstand voltage	Max. 50 Psig	Link above	3/4" NPT
Operating temperature	0~40°C	Link below	M42
Operation pH	pH4~11	Housing Material	PP, acid and alkali resistance/food grade/ zero dissolution
Response time	T90 ≤120 second	Dimension	ø45*L214mm
Communication	RS-485 Modbus RTU Web Browser direct reading(192.168.1.80)	Weight	≤340 g
		Power	Auto-cleaning:12VDC or24VDC Non auto-cleaning:9~36VDC
Safety certification	CE,FCC	Power consumption	Auto-cleaning:1.6w Non auto-cleaning:0.8w
		Ingress Protection Rating	IP68

## [Dimension]: mm

