

**T9001**

**Ammonia Nitrogen On-line Automatic Monitoring**



## **1. Product Overview:**

Ammonia nitrogen in water refers to ammonia in the form of free ammonia, which mainly comes from decomposition products of nitrogen-containing organic matter in domestic sewage by microorganisms, industrial wastewater such as coking synthetic ammonia, and farmland drainage. When the content of ammonia nitrogen in water is high, it is toxic to fish and harmful to human beings in varying degrees. The determination of ammonia nitrogen content in water is helpful to evaluate the pollution and self-purification of water, so ammonia nitrogen is an important indicator of water pollution.

The analyzer can work automatically and continuously for a long time without attendance according to the site settings. It is widely used in industrial pollution source discharge wastewater, municipal sewage treatment plant wastewater, environmental quality surface water and other occasions. According to the complexity of site test conditions, the corresponding pretreatment system can be selected to ensure the test process is reliable, test results are accurate, and fully meet the needs of different occasions.

## **2. Product Principle:**

This product adopts salicylic acid colorimetric method. After mixing water sample and masking agent, ammonia nitrogen in the form of free ammonia or ammonium ion in alkaline environment and sensitizing agent reacts with salicylate ion and hypochlorite ion to form a colored complex. The analyzer detects the colour change and converts the change into ammonia nitrogen value and output it. The amount of coloured complex formed is equal to the amount of ammonia nitrogen.

This method is suitable for wastewater with ammonia nitrogen in the range of 0-300 mg/L. Excessive calcium and magnesium ions, residual chlorine or turbidity may interfere with the measurement.

### 3. Technical Parameters:

No.	Name	Technical Parameters
1	Range	Suitable for wastewater with ammonia nitrogen in the range of 0-300 mg/L.
2	Test Methods	Salicylic acid spectrophotometric colorimetry
3	Measuring range	0~300mg/L(Grading 0~8 mg/L,0.1~30 mg/L,5~300 mg/L)
4	Detection Lower limit	0.02
5	Resolution	0.01
6	Accuracy	±10% or ±0.1mg/L(take the larger value)
7	Repeatability	5% or 0.1mg/L
8	Zero Drift	±3mg/L
9	Span Drift	±10%
10	Measurement cycle	Minimum20 minutes. Color chromogenic time can be modified in 5-120min according to site environment.
11	Sampling period	Time interval (adjustable), integral hour or trigger measurement mode can be set.
12	Calibration cycle	Automatic calibration (1-99 days adjustable), according to actual water samples, manual

		calibration can be set.
13	Maintenance cycle	Maintenance interval is more than one month, about 30 minutes each time.
14	Human-machine operation	Touch screen display and instruction input.
15	Self checking protection	Working status is self-diagnostic, abnormal or power failure will not lose data. Automatically eliminates residual reactants and resumes work after abnormal reset or power failure.
16	Data storage	No less than half a year data storage
17	Input interface	Switch quantity
18	Output interface	Two RS232 digital output, One 4-20mA analog output
19	Working Conditions	Working indoors; temperature 5-28°C; relative humidity≤90% (no condensation,no dew)
20	Power Supply and Consumption	AC230±10%V, 50~60Hz, 5A
21	Dimensions	355×400×600(mm)