



## Online Ammonia Nitrogen Analyzer

### Model : NHNG-3010

NHNG-3010 NH<sub>3</sub>-N automatic online analyzer is an ammonia nitrogen (NH<sub>3</sub>-N) automatic monitoring instrument ,BOQU has completely independent intellectual property rights. It is the world's instrument for online analysis of ammonia nitrogen using advanced flow injection analysis technology. It can automatically monitor NH<sub>3</sub>-N in various water bodies for a long time unattended operation. It can measure very low and very high concentration of ammonia nitrogen. It is suitable for rapid analysis of water content in rivers and lakes, tap water, discharged wastewater, high-concentration sewage and various solutions in the laboratory or on-site.

#### Working Principle

The peristaltic pump of the instrument delivers the release liquid (diluted NaOH solution) as the carrier fluid, and the injection valve rotates according to the set number of times to form a mixture of the NaOH solution and the water sample, and is released when the mixing belt passes through the separation chamber of the gas-liquid separator. The ammonia gas in the sample is taken out, and the ammonia gas is passed through the gas-liquid separation membrane and then received by the receiving liquid (BTB acid-base indicator solution), and the ammonium ion causes the pH of the solution to rise, and the color changes from yellow-green to blue. The ammonium-enriched receiving solution is sent to the flow cell of the colorimeter, and the photovoltage change value is measured to determine the NH<sub>3</sub>-N content in the sample.

#### Main Feature:

- Advanced flow injection analysis technology and safe and convenient analytical methods.
- Unique automatic enrichment function, the instrument has an oversized measuring range: 0.05mg/L-1500mg/L.
- The reagent is non-toxic, just dilute NaOH and distilled water with acid-base indicator, which can be easily prepared.
- The unique gas-liquid separator (patented) eliminates the cumbersome and expensive pre-treatment unit and eliminates the need to clean the instrument. It is the most simplified instrument of its kind.
- Operating and maintenance costs are extremely low.

#### Technical parameters:

Measuring range:0-300 mg/L (0-10mg/L;10-150mg/L;10-300mg/L) .

Accuracy:  $\leq \pm 10\%$  when  $\geq 0.2$  mg/L,  $\leq \pm 0.02$  mg/L < 0.2 mg/L

Stability:  $\leq \pm 10\%$  in 24 hours; Repeatability:  $\leq \pm 3\%$

Measurement period: The minimum measurement period is 30 minutes, according to the actual water sample, The digestion time can be modified from 5 to 120 minutes.

Sampling period: Time interval(10~9999min adjustable by yourself) and

Integral time measurement mode;

Calibration period: adjustable in 1~99days;

Maintenance period: Usually one time per month and 30 minutes each time automatic

Output: 4~20mA( 2 ways) RS232,RS485; Relay: 2 relays;

Power: AC220  $\pm 10\%$  V, 50  $\pm 10\%$  Hz, 5 A;

Dimension size: Height 1450  $\times$  Width 510  $\times$  Length 450 mm;

Data saved: the data can be saved when abnormal alarms and power off.

Display: touch screen and Command Input

Other: When Reset after abnormal alarm and power on after off, the instrument automatically discharges residual reactants in the instrument and automatically resumes working status.

