



## W8089 Nitrogen Oxide Monitor

Industrial Online Nitrogen Monitoring Instrument is a microprocessor-based water quality online monitoring and control device. Equipped with various types of ion electrodes, it is widely used in power plants, petrochemicals, metallurgy and electronics, mining, papermaking, biofermentation engineering, pharmaceuticals, food and beverage, and environmental water treatment. It continuously monitors and controls the ion concentration values in aqueous solutions.

### Instrument Features:

- Large LCD display
- Intelligent menu operation
- Historical data logging
- Multiple automatic calibration functions
- Differential signal measurement mode for stable and reliable performance
- Manual/automatic temperature compensation
- Three sets of relay control switches
- Upper limit, lower limit, and hysteresis control
- Multiple outputs: 4-20mA & RS485

- Simultaneous display of ion concentration, temperature, current, etc.
- Password protection to prevent unauthorized operation

### Technical Specifications:

(1) Measurement Range (based on electrode ):

Concentration: 0.4–62,000 mg/L

(Solution pH: 2.5–11 pH);

Temperature: -10–150.0°C;

(2) Resolution:

Concentration: 0.01/0.1/1 mg/L;

Temperature: 0.1°C;

(3) Basic Error:

Concentration:  $\pm 5\%$ –10% (based on electrode range);

Temperature:  $\pm 0.3^\circ\text{C}$ ;

(4) Dual Current Output:

0/4–20mA (load resistance  $< 750\Omega$ );

20–4mA (load resistance  $< 750\Omega$ );

(5) Communication Output: RS485 MODBUS RTU;

(6) Three Sets of Relay Control Contacts:

5A 250VAC, 5A 30VDC;

(7) Power Supply (Optional):

85–265VAC  $\pm 10\%$ , 50 $\pm 1$ Hz, Power  $\leq 3\text{W}$ ;

9–36VDC, Power:  $\leq 3\text{W}$ ;

(8) Dimensions: 144×144×118mm;

(9) Mounting Options: Panel-mounted,  
wall-mounted, conduit-mounted;

Panel cutout size: 137×137mm;

(10) Protection Rating: IP65;

(11) Instrument Weight: 0.8kg;

(12) Instrument operating environment:

Ambient temperature: -10 to 60°C;

Relative humidity:  $\leq 90\%$ ;

No strong magnetic field interference except  
for the Earth's magnetic field.