W8088CA
Hardness (Calcium Ion) Monitor

The industrial online ion monitor is a microprocessor-based water quality online monitoring and control instrument. Equipped with various types of ion-selective electrodes, it is widely used in power plants, petrochemicals, metallurgy, electronics, mining, papermaking, bio-fermentation engineering, pharmaceuticals, food and beverage, and environmental water treatment. It enables continuous monitoring and control of ion concentrations in aqueous solutions.

Instrument Features:

- Large black-and-white LCD screen
- Intelligent menu operation
- Historical data logging
- Multiple automatic calibration functions
- Differential signal measurement mode, stable and reliable
- Manual / automatic temperature compensation
- Three sets of relay control switches
- High limit, low limit, and hysteresis control
- 4-20mA & RS485 multiple output options
- Simultaneous on-screen display of ion concentration, temperature, current, etc.
- Password protection to prevent unauthorized operation

Technical Specifications:

(1) Measurement Range (depending on electrode):

- Concentration: 0.02 – 40000 mg/L (solution pH: 2.5 – 11 pH)
- Temperature: 0 – 50.0 °C

(2) Resolution:

- Concentration: 0.01 / 0.1 / 1 mg/L
- Temperature: 0.1 °C

(3) Basic Error:

- Concentration: ±5%
- Temperature: ±0.3 °C

(4) 2-Channel Current Output:

- 0/4 – 20mA (load resistance < 500Ω)
- 20 – 4mA (load resistance < 500Ω)

(5) Communication Output:

- RS485 MODBUS RTU

(6) Three Sets of Relay Control Contacts:

- 5A 250VAC, 5A 30VDC

(7) Power Supply (optional):

- 85 – 265VAC ±10%, 50 ±1 Hz, Power ≤ 3W
- 9 – 36 VDC, Power ≤ 3W

(8) Dimensions:

- 144 × 144 × 118 mm

(9) Installation Methods:

- Panel-mounted, Wall-mounted, Pipe-mounted

- Panel cut-out size: 137 × 137 mm

(10) Protection Rating:

- IP65

(11) Instrument Weight:

- 0.8 kg

(12) Operating Environment:

- Ambient temperature: -10 – 60 °C
- Relative humidity: ≤ 90%
- No strong magnetic interference except for the Earth's magnetic field.