

## Intelligent Online Free Chlorine Analyzer

W761 with CL2.2 Sensor for Sea Water



The Inline Residual Chlorine Analyzer is equipped with German-made CL2.2 sensor, which uses a coated amperometric dual-electrode system to detect only hypochlorous acid (HOCL) in water, with automatic temperature compensation, analog/digital signal output, no zero calibration, and slope loss affected by pH; It applies to high-salt water for disinfection monitoring of drinking water, swimming pool water, slightly polluted process/cooling water, and features high-salt resistance, stable dual-electrode measurement with fast response, easy operation, and environmental demands.

### Application Fields

Core adaptation to high-salt concentration water bodies, with specific scenarios as follows:

1. Basic Environment: Brine or seawater with a salt concentration of 3.5%~26% (conductivity > 50mS).
2. Specific Applications:
  - Disinfection monitoring of drinking water and swimming pool water;
  - Disinfection monitoring of slightly polluted process water and cooling water treatment;
  - Must be used with a dedicated flow cell to ensure the water flow meets requirements.

### Technical Parameters

| Category                | Detailed Parameters                                                                                                                                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic Parameters        | Measuring Parameter: Free chlorine; Applicable Chlorinating Agents: Inorganic chlorine compounds (NaOCl, Ca(OCl) <sub>2</sub> , chlorine gas, membrane electrolytic chlorine); Diaphragm-free electrolytic chlorine is prohibited |
| Measurement Performance | Measurement Range: 0.005~2 mg/L (ppm, resolution 0.001 mg/L);                                                                                                                                                                     |

|                                  |                                                                                                                                                                                                                                                |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | 0.05~20 mg/L (ppm, resolution 0.01 mg/L);<br>Response Time T90: Approximately 30 seconds                                                                                                                                                       |
| <b>Environmental Conditions</b>  | Water Temperature: 0~45°C (no condensation);<br>Ambient Temperature: 0~55°C;<br>pH Operating Range: 6~8;<br>Flow Rate: 15~30 L/H (in flow cell)                                                                                                |
| <b>pH Dependence</b>             | Approximately 60% slope loss at pH=8, and approximately 80% at pH=8.5 (with pH=7 as the reference);<br>pH fluctuation must be maintained < 0.05                                                                                                |
| <b>Signal &amp; Power Supply</b> | Output Signal: 4~20mA/0~±2V (analog), Modbus RTU (digital);<br>Power Supply Voltage: 12~30VDC (2-pin terminal), 9~30VDC (5-pin M12)                                                                                                            |
| <b>Connection Method</b>         | 2-pin terminal (2×1mm <sup>2</sup> ), 5-pin M12 aviation connector                                                                                                                                                                             |
| <b>Interfering Factors</b>       | Chlorine Dioxide (ClO <sub>2</sub> ): Measured, concentration coefficient 9;<br>Ozone (O <sub>3</sub> ): Measured; Diaphragm-free chlorine electrolysis causes interference                                                                    |
| <b>Physical Characteristics</b>  | Pressure Resistance: Maximum absolute pressure 2 bar, maximum relative pressure 1 bar; Materials: Semipermeable membrane, PVC-U, ABS; Dimensions: Diameter 25mm, length 190~220mm (depending on connection method); Weight: Approximately 125g |
| <b>Others</b>                    | Polarization Time: 1 hour; Electromagnetic Compatibility (EMC): Interference emission Class B, immunity meets industrial requirements (EN 61326-1/2-3)                                                                                         |