

Application

LM-500 Multi-parameter water quality monitoring sensor can simultaneously detect: temperature, conductivity, pH, DO (dissolved oxygen), turbidity, ORP (Redox potential), ammonium ion, potassium ion, chlorophyll, blue-green algae, suspended solids and other water quality parameters.

LM-500 also equipped with self-cleaning components, can eliminate bubbles, prevent microbial growth, can be automatically continuously monitoring the water quality, data remote automatic transmission, check data at any time for the site, widely used in rivers, lakes, oceans, reservoirs, industrial water and groundwater and other water applications.

This online water quality monitoring system can be used to get the basic situation of water quality and sudden situation of water pollution timely and accurately, it is also a good choice for better service of water quality classification and early-warning service.

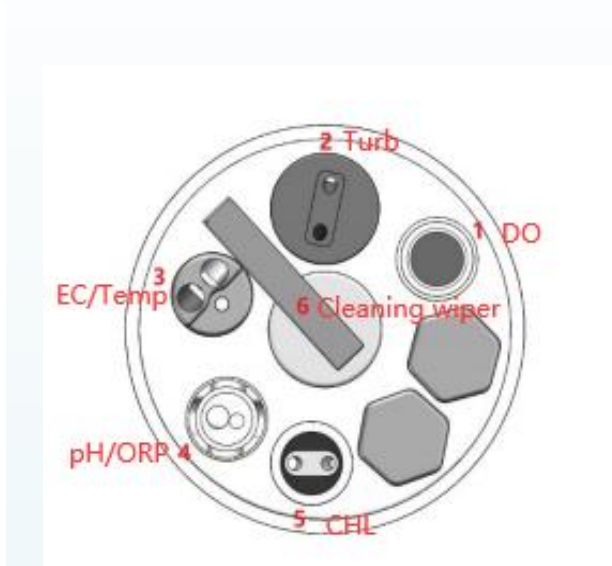
Function Description

- Equipped with self-cleaning device, can support long-term online monitoring in no-guarding places.
- Monitoring several parameters at simultaneously.
- Support standard RS485 and Modbus, flexible for networking.
- Sensor body shell is easy to clean, strong, corrosion resistance.
- Factory calibration, convenient for installation and free maintenance;

Technical Parameter

| Composition | Content |
|-------------------------|---|
| Interface | 1 communication interface, 8 interfaces for the base, including 7 sensor interfaces and 1 cleaning kit interface; |
| Dimension | Length 548mm, diameter 88mm |
| Weight | 4.5kg (including 4pcs sensors/1 cleaning kit/ protective cover) |
| Working temperature | -5~50° C (not frozen) |
| Storage temperature | -10-60° C (pH/ ORP/ammonium ion/potassium ion sensor is 0-50° C) |
| Sampling frequency | 5Hz |
| Measuring depth | 0-100m |
| Communication interface | RS485(Modbus) |
| Power | DC12~24V |
| Sensors | Default parameters: pH, conductivity&temperature, turbidity, dissolved oxygen; Optional parameters: depth*, ORP*, ammonium ion*, potassium ion*, salinity*, chlorophyll*, blue-green algae*, |
| Accessories | Cable, cleaning kit, analysis software, carrying case; |
| Guarantee period | 24 months, except pH and optical DO membrane for 12 months. |

▲ The parameters are the performance parameters of the instrument under typical application and do not include possible changes in the future. * index is the extended index.



Technical Parameter

| Measuring parameter | Measuring range | Resolution | Accuracy |
|---------------------|--------------------------------|--|--|
| pH | 0~14 pH | 0.01pH | ±0.1pH |
| ORP | -1999~1999mV | 0.1mV | ±20mV (standard solution) |
| Conductivity | 1μS/cm~200ms/cm | 1μS/cm~100μS/cm (according to range) | 0~100ms/cm : reading value ±0.5%; 100~200ms/cm: reading value ±1% |
| Depth | 0-100m, 0-200m (for option) | 0.001~0.01m (according to range) | <±0.05 %F.S |
| DO | 0~20mg/ L | 0.001~0.01mg/ L | 0~100%<±1.5% 100~200%<±2% |
| Temperature | 0~50°C | 0.2°C | ±0.2°C |
| Chlorophyll | 0~400ug/L | 0.1ug/L | ±0.1% |
| Blue-green algae | 0~100ug/L or 0~100RTU | 0.1ug/L | ±0.05ug/L |
| Turbidity | 0.01~4000NTU | 0-10NTU: 0.01NTU 10-100NTU: 0.1NTU 100-4000NTU: 1NTU | 0-10NTU: ±0.1NTU; 10-100NTU: reading value ±2% or ±0.1NTU which one is bigger; 100-4000NTU: reading value ±5% |
| Salinity | 0~80ppt | 0.01ppt | reading value ±1% |
| Ammonium ion | 0~1000ppm/L | 0.1ppm | reading value ±10% or 2mg/L |
| Potassium ion | 0~1000ppm/L | 0.1ppm | reading value ±10% or 2mg/L |

▲ The parameters are the performance parameters of the instrument under typical application and do not include possible changes in the future.