# PH Online Analyzer



## Measurement Principle

The pH sensor is a digital PH sensor using RS485 communication interface and standard Modbus protocol. It adopts stainless steel corrosion-resistant casing, IP68 protection grade, built-in PT1000 temperature sensitive resistor and compensation algorithm, which has the advantages of high precision, long life and small drift, and is suitable for various harsh working environments.

## Main Features

- Built-in PT-1000 temp. sensitive resistor, effective temperature compensation
- Support replacement of electrode cores to reduce operation and maintenance costs
- Industrial grade composite pH electrode, suitable for harsh working environment
- Corrosion-resistant shell, waterproof grade IP68, can work underwater for a long time
- RS485 communication interface, standard Modbus protocol, easy to integrate.
- Standard digital signal output,can achieve integration and networking with other equipment without controller.
- Built-in self-diagnosis function to ensure the accuracy of data.
- Digital sensor,high anti-jamming capacity and far transmission distance.
- Plug-and-play sensor,quick and easy installation.
- Sensor power supply positive and negative reverse connection protection
- Sensor RS485 A/B terminal is connected to the power supply protection
- With time display, data storage and historical data viewing function;
- Optional data wireless transmission module.

## Typical Application

- Surface water, waterworks, aquaculture.
- Municipal sewage, industrial wastewater, sewage treatment, industrial process.

| Sensor Technical Specifications | |
|---|---|
| **Measuring range** | 0-14 pH |
| **Main material** | 316L Stainless steel；Cable: PUR |
| **Resolution** | 0.01 pH |
| **Repeatability** | ±0.1 pH |
| **Precision** | ±0.1 pH |
| **Temperature range** | -15-100℃ |
| **Temp. resolution** | 0.1℃ |
| **Temp. accuracy** | 0.5℃ |
| **Electrode withstand voltage** | 0-0.1Mpa |
| **Operating temp.** | 0-45℃ (without freezing) |
| **Response time** | <10s |
| **Operating Voltage** | 9-36V |
| **Protection class** | IP68/NEMA6P |
| **Dimensions** | Dia. 34mm* Length 252mm |
| **Mounting thread** | 3/4 inch front and rear threads |
| **Cable length** | Standard cabel:10M，Max extended to 200M. |

| Controller Technical Specifications | |
|---|---|
| **Display** | 128*64 Graphic dot matrix LCD with LED strong backlight, can operate in direct sunlight |
| **Power supply** | AC power supply：85-500VAC<br>DC power supply：9-36VDC |
| **Main material** | PA66+GF25+FR(Cover)；Aluminum alloy powder（Lower casing） |
| **Output** | 3-way 4-20mA analog output, programmed response parameter and response range |
| **Relay** | Three-way relays, programmed response parameter and response value |
| **Communication protocol** | MODBUS RS485 |
| **Storage temperature** | -20-70℃ |
| **Measuring temperature** | -15-60℃ |
| **Protective rate** | IP66/NEMA4X |
| **Dimensions** | 145mm*125mm*162mm(L*W*H) |
| **Weight** | 1.35KG |