

pH Transmitter



Online pH/ORP Meter T6000

Function

Industrial on-line PH/ORP meter is an on-line water quality monitoring and control instrument with microprocessor.

PH electrodes or ORP electrodes of different types are widely used in power plant, petrochemical industry, metallurgical electronics, mining industry, paper industry, biological fermentation engineering, medicine, food and beverage, environmental water treatment, aquaculture, modern agriculture, etc.

The pH (acid, alkalinity) value, ORP (oxidation, reduction potential) value and temperature value of aqueous solution were continuously monitored and controlled.

Typical Use

The instrument is equipped with different types of pH or ORP sensors. Widely used in power plants, petrochemical industry, metallurgical electronics, mining, paper industry, biological fermentation engineering, medicine, food and beverage, environmental protection water treatment, aquaculture, modern agricultural planting and other industries. The pH (acidity and alkalinity) value, ORP (redox potential) value and temperature value of water solution were continuously monitored and controlled.

Mains Supply

85~265VAC \pm 10%,50 \pm 1Hz, power \leq 3W;

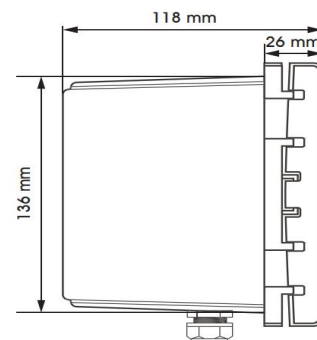
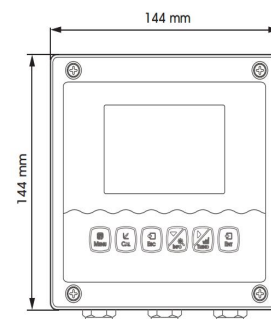
9~36VDC, power consumption \leq 3W;

Measuring Range

pH: -2~16.00pH;

ORP: -2000~+2000mV;

Temperature: -10~150.0 $^{\circ}$ C ;



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Features

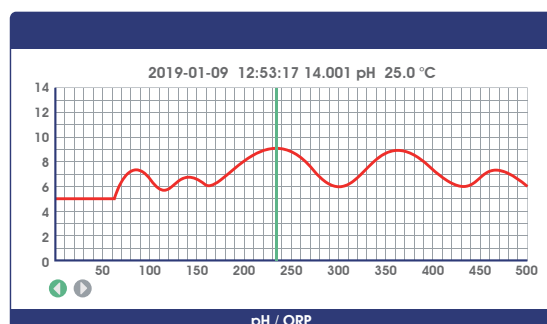
1. Color LCD display
2. Intelligent menu operation
3. Multiple automatic calibration
4. Differential signal measurement mode, stable and reliable
5. Manual and automatic temperature compensation
6. Three relay control switches
7. 4-20mA & RS485, Multiple output modes
8. Multi parameter display simultaneously shows – pH/ORP, Temp, current, etc.
9. Password protection to prevent misoperation by non-staff.
10. The matching installation accessories make the installation of the controller in complex working conditions more stable and reliable.
11. High & low alarm and hysteresis control. Various alarm outputs. In addition to the standard two-way normally open contact design, the option of normally closed contacts is also added to make the dosing control more targeted.
12. The 3-terminal waterproof sealing joint effectively prevents water vapor from entering, and isolates the input, output and power supply, and the stability is greatly improved. High resilience silicone keys, easy to use, can use combination keys, easier to operate.
13. The outer shell is coated with protective metal paint, and safety capacitors are added to the power board, which improves the strong magnetic anti-interference ability of industrial field equipment. The shell is made of PPS material for more corrosion resistance. The sealed and waterproof back cover can effectively prevent water vapor from entering, dustproof, waterproof, and corrosion-proof, which greatly improves the protection capability of the whole machine.



Measurement mode



Calibration mode



Trend chart

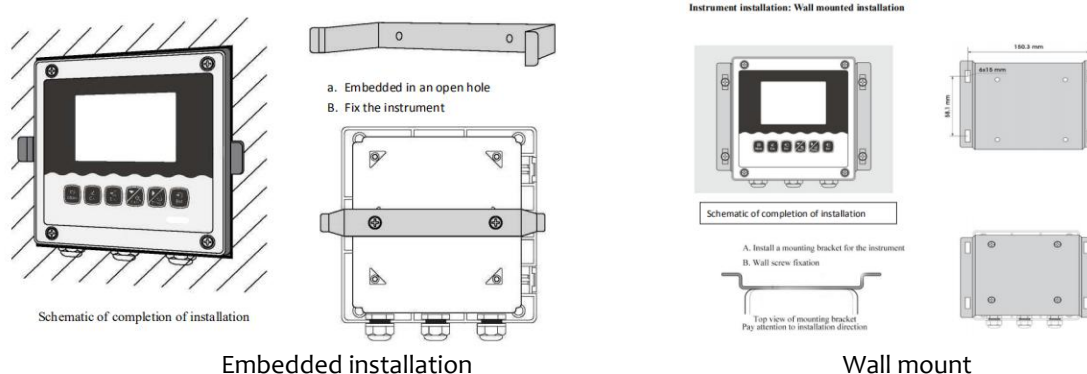


Setting mode

Electrical connections

Electrical connection The connection between the instrument and the sensor: the power supply, output signal, relay alarm contact and the connection between the sensor and the instrument are all inside the instrument. The length of the lead wire for the fixed electrode is usually 5-10 meters, and the corresponding label or color on the sensor Insert the wire into the corresponding terminal inside the instrument and tighten it.

Instrument installation method



Technical specifications

| | |
|------------------------------|--|
| Measuring range | pH:-2~16pH; ORP:-2000~+2000mV |
| Unit | pH,mV |
| Resolution | pH:0.001pH; ORP:1mV |
| Basic error | pH:±0.01pH;ORP:±1mV; |
| Temperature | -10~150.0°C(Depend on the Sensor) |
| Temp. resolution | 0.1°C |
| Temp. accuracy | ±0.3°C |
| Temp. compensation | 0~150.0°C |
| Temp. compensation | Manual or automatic |
| Stability | pH:≤0.01pH/24h;ORP: ≤1mV/24h |
| Current outputs | Two 4~20mA,20~4mA,0~20mA |
| Signal output | RS485 MODBUS RTU |
| Other functions | Data record &Curve display |
| Three relay control contacts | 5A 250VAC,5A 30VDC |
| Optional power supply | 85~265VAC,9~36VDC,power consumption≤3W |
| Working conditions | No strong magnetic field interference around except the geomagnetic field. |
| Working temperature | -10~60°C |
| Relative humidity | ≤90% |
| Waterproof rating | IP65 |
| Weight | 0.8kg |
| Dimensions | 144×144×118mm |
| Installation opening size | 138×138mm |
| Installation methods | Panel & wall mounted or pipeline |

CS1545 pH Sensor

Designed for High temperature and biological fermentation process.



CS1545 pH electrode adopts the most advanced solid dielectric in the world and large-area PTFE liquid junction. Not easy to block, easy to maintain. The long-distance reference diffusion path greatly prolongs the service life of the electrode in harsh environments. With built-in temperature sensor (Pt100, Pt1000, etc. can be selected according to user requirements) and wide temperature range, it can be used in explosion-proof areas.

1, Take use of ceramic diaphragm, so that the electricity has a stable liquid connection potential and low resistance characteristics, anti-blocking, anti-pollution.

2, High temperature resistance, 130°C steam disinfection (disinfection 30-50 times), safety and health, in line with the requirements of food hygiene, fast response, stability, long service life.

3, With high temperature disinfection sensitive glass membrane, pH range: 0-14pH, temperature range: - 10-130 °C, pressure range or less 0.6 Mpa, zero potential PH = 7.00.

4, The electrode is mainly used for high temperature sterilization of biochemical fermentation of pH value measurement.

| | |
|---------------------------------|---|
| Model No. | CS1545 |
| pH zero point | 7.00 ± 0.25pH |
| Reference system | SNEX Ag/AgCl/KCl |
| Electrolyte solution | 3.3M KCl |
| Membrane resistance | <800MΩ |
| Housing material | Glass |
| Liquid junction | SNEX |
| Waterproof grade | IP68 |
| Measurement range | 0-14pH |
| Accuracy | ±0.05pH |
| Pressure resistance | ≤0.6Mpa |
| Temperature compensation | PT100,PT1000 (Optional) |
| Temperature range | 0-130℃ |
| Calibration | Sample calibration, standard liquid calibration |
| Double Junction | Yes |
| Cable length | Standard 5m cable, can be extended to 100m |
| Dimensions: | 12*120mm or 12*225mm (Customize) |
| Installation thread | PG13.5 |
| Application | High temperature and biological fermentation process. |