

pH Transmitter



Online pH/ORP Meter T4000

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±10%,50±1Hz, power ≤3W;

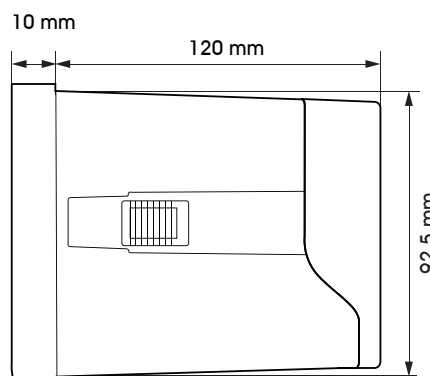
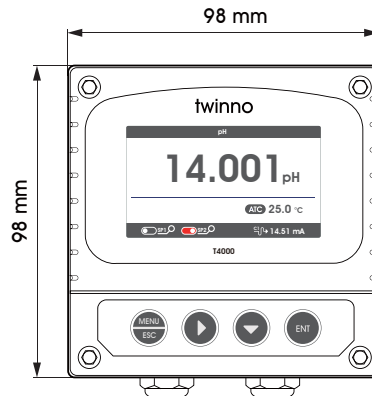
9~36VDC, power consumption≤3W;

Measuring Range

pH: -2~16.00pH;

ORP: -2000~+2000mV;

Temperature: -10~150.0℃;



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Features

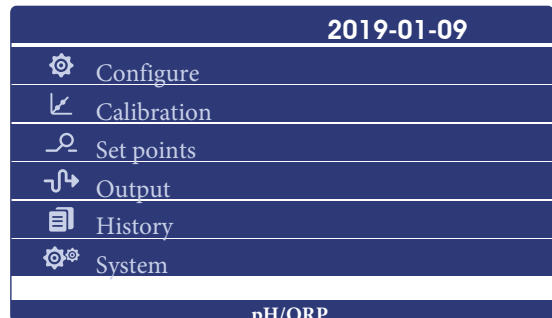
1. Color LCD display
2. Intelligent menu operation
3. Multiple automatic calibration
4. Differential signal measurement mode, stable and reliable
5. Manual and automatic temperature compensation
6. Two relay control switches
7. 4-20mA & RS485, Multiple output modes
8. Multi parameter display simultaneously 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



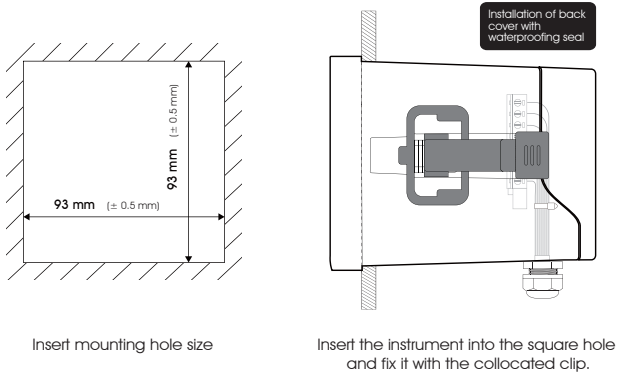
Setting mode

Electrical connections

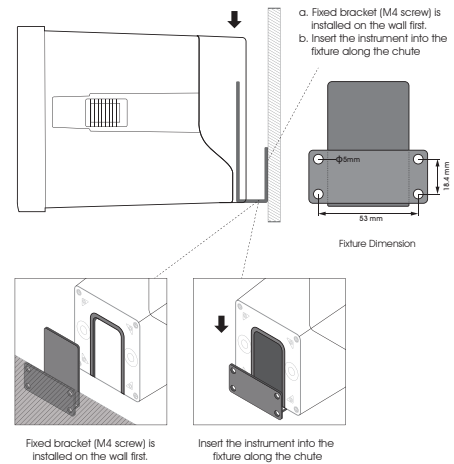
Electrical connection The connection between the instrument and the sensor: the power supply, output signal, relay alarm contact and the connection between the sensor and the instrument are all inside the instrument. The length of the lead wire for the fixed electrode is usually 5-10 meters, and the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

Instrument installation method

Embedded installation



Wall mounting



Technical specifications

Measuring range	pH:-2~16pH; ORP:-1999~+1999mV
Unit	pH,mV
Resolution	pH:0.01 pH; ORP:1mV
Basic error	pH:±0.02pH;ORP:±2mV;
Temperature	0~150.0°C(Depend on the Sensor)
Temperature resolution	0.1°C
Temperature accuracy	±0.3°C
Temperature compensation	0~150.0°C
Temperature compensation	Manual or automatic
Stability	pH:≤0.02pH/24h;ORP: ≤2mV/24h
Current outputs	Two :4~20mA,20~4mA,0~20mA
Communication output	RS485 MODBUS RTU
Two relay control contacts	Two:3A 250VAC,3A 30VDC
Optional power supply	85~265VAC,9~36VDC,power consumption≤3W
Working conditions	No strong magnetic field interference except the geomagnetic field.
Working temperature	-10~60°C
Relative humidity	≤90%
Waterproof rating	IP65
Weight	0.6kg
Dimensions	98×98×130mm
Installation opening size	92.5×92.5mm
Installation methods	Panel, wall mounted or Pipeline



CS1768 pH Electrode

Designed for viscous fluids, protein environment, silicate, chromate, cyanide, NaOH, seawater, brine, petrochemical, natural gas liquids, high-pressure environment.

Complex environment

- ★ Double salt bridge design, double layer seepage interface, resistant to medium reverse seepage.

- ★ The ceramic hole parameter electrode seeps out of the interface, which is not easy to be blocked.

- ★ High-strength glass bulb design, the glass appearance is stronger.

- ★ Large sensing bulbs increase the ability to sense hydrogen ions, and perform well in complex environment.

- ★ The electrode material PP has high impact resistance, mechanical strength and toughness, resistance to a variety of organic solvents and acid and alkali corrosion.

- ★ Digital sensor with strong anti-interference ability, high stability and long transmission distance.

Model No.	CS1768
pH zero point	7.00 ± 0.25pH
Reference system	SNEX Ag/AgCl/KCl
Electrolyte solution	3.3M KCl
Membrane resistance	<600MΩ
Housing material	PP
Liquid junction	SNEX
Waterproof grade	IP68
Measurement range	0-14pH
Accuracy	±0.05pH
Pressure resistance	-1MPa-2.0MPa
Temperature compensation	NTC10K,PT100,PT1000 (Optional)
Temperature range	0-90°C
Calibration	Sample calibration, standard liquid calibration
Double Junction	Yes
Cable length	Standard 10m cable, can be extended to 100m
Installation thread	NPT3/4"
Application	Viscous fluids, protein environment, silicate, chromate, cyanide, NaOH, seawater, brine, petrochemical, natural gas liquids, high-pressure environment.