

PHG-2081Pro Industrial PH&ORP Meter

Built-in A/D conversion module, compatible with a variety of analog signal electrodes. Complete functions, stable performance, easy operation, low power consumption, safety and reliability are the outstanding advantages of this instrument. This instrument is equipped with RS485 transmission interface, which can be connected to the host computer through ModbusRTU protocol to realize monitoring and recording. It can be widely used in industrial occasions such as thermal power generation, chemical industry, metallurgy, environmental protection, pharmaceutical, biochemical, food and tap water.

Technical Index

Functions	pH	ORP
Measuring range	-2.00pH to +16.00 pH	-2000mV to +2000mV
Resolution	0.01pH	1mV
Accuracy	±0.01pH	±1mV
Temp. compensation	Pt 1000/NTC10K	
Temp. range	-10.0 to +130.0°C	
Temp. compensation range	-10.0 to +130.0°C	
Temp. accuracy	±0.5°C	
Display	Back light, dot matrix	
pH/ORP current output1	Isolated, 4 to 20mA output , max. load 500Ω	
Temp. current output 2	Isolated, 4 to 20mA output , max. load 500Ω	
Current output accuracy	±0.05 mA	
RS485	Mod bus RTU protocol	
Baud rate	9600/19200/38400	
Maximum relay contacts capacity	5A/250VAC,5A/30VDC	
Language selection	English/ Chinese	
Waterproof grade	IP65	
Power supply	From 90 to 260 VAC, power consumption < 4 watts, 50/60Hz	
Material	ABS	
Installation	panel/wall/pipe installation	
Size/Weight	144mm×144mm×104mm, 0.9Kg	



PHG-2081S Industrial PH&ORP Meter



Instruments are used in industrial measuring of the temperature and PH/ORP, such as waste water treatment, environmental monitoring, fermentation, pharmacy, food process agriculture production, etc.

Technical Index

Specifications	Details
Name	Online pH Meter
Shell	ABS
Power supply	90 – 260V AC 50/60Hz
Current output	2 roads of 4-20mA output (pH .temperature)
Relay	5A/250V AC 5A/30V DC
Overall dimension	144×144×104mm
Weight	0.9kg
Communication Interface	Modbus RTU
Measure range	-2.00~16.00 pH -2000~2000mV -30.0~130.0°C
Accuracy	±1%FS ±0.5°C
Protection	IP65

CN117 Industrial Explosion-proof pH/ORP Meter



Features

CN117 two-wire explosion-proof industrial PH/ORP meter is developed by CNIC series of intelligent online chemical analyzer, environmental adaptability, simple operation and excellent test performance to have a high price, accurate measurement solution Of the pH or ORP value. Can be widely used in thermal power, chemical fertilizers, metallurgy, environmental protection, pharmaceutical, biochemical, food and water solution pH or ORP value of the continuous monitoring. The transmitter uses explosion-proof cast aluminum housing, good sealing performance Protection class up to IP67, especially for the site environment, unfavorable personnel long stay in industrial sites. Transmitter using two-wire system, 24VDC power supply, wiring simple. Output isolation 4-20mA, RS485, 4-20mA + RS485 standard DC signal can be provided to display, record, control, regulation and other instruments or PLC, DCS, FCS system.

Basic function

High intelligence: CN117 industrial PH / ORP transmitter using high-precision AD conversion and micro-controller micro-processing technology to complete the pH measurement, temperature measurement, automatic temperature compensation, instrument self-test and other functions.

High reliability: components highly integrated, without the complexity of the function switch and adjustment knob.

Anti-interference ability: The latest devices, impedance up to 1012Ω; current output using optical isolation technology, anti-interference ability to achieve Far EasTone. With good electromagnetic compatibility.

Waterproof and dust-proof design: protection class IP67, suitable for outdoor use

25 °C Conversion: pure water and ammonia added to the ultra-pure water at 25 °C reference temperature conversion, to achieve a 25 °C shows the pH value, especially for a variety of water quality measurement of power

plants.

Communication: RS485, easy to join the computer for monitoring and communication.

Intrinsically Safe Explosion-proof: Intrinsically safe design, explosion-proof mark ExiaIICT6Ga is used for zone 0, zone 1, zone 2.

Technical Indexes

1. Measuring range: pH: 0~14.00pH , resolution: 0.01pH; Temperature: 0~100°C, resolution: 0.3°C
2. Automatic temperature compensation: 0~100°C, 25°C as the basis;
3. Water sample tested: 0~100°C, 0.3MPa;
4. Stability: $\pm 0.02\text{pH}/24\text{h}$;
5. Input impedance: $\geq 10^{12} \Omega$;
6. Isolated current output: 4~20mA; Input, output, power three isolation (via a secure grid supply)
7. Output current error: $\leq \pm 0.5\% \text{FS}$;
8. Protection grade: IP65, highest up to IP67;
9. Explosion-proof grade: ExiaIICT6 Ga;
10. Working site: Ambient temperature: 0~60°C relative humidity: <85%;
11. Intrinsically safe parameters: $U_i=28\text{VDC}$, $I_i=93\text{mA}$, $P_i=0.65\text{W}$, $C_i=0.044\mu\text{F}$, $L_i=0\text{mH}$;

PHG-2091Pro Industrial PH&ORP Meter

Built-in A/D conversion module, compatible with a variety of analog signal electrodes. Complete functions, stable performance, easy operation, low power consumption, safety and reliability are the outstanding advantages of this instrument. This instrument is equipped with RS485 transmission interface, which can be connected to the host computer through ModbusRTU protocol to realize monitoring and recording. It can be widely used in industrial occasions such as thermal power generation, chemical industry, metallurgy, environmental protection, pharmaceutical, biochemical, food and tap water.

Technical Index

Functions	pH	ORP
Measuring range	-2.00pH to +16.00 pH	-2000mV to +2000mV
Resolution	0.01pH	1mV
Accuracy	±0.01pH	±1mV
Temp. compensation	Pt 1000/NTC10K	
Temp. range	-10.0 to +130.0°C	
Temp. compensation range	-10.0 to +130.0°C	
Temp. accuracy	±0.5°C	
Display	Back light, dot matrix	
pH/ORP current output1	Isolated, 4 to 20mA output , max. load 500Ω	
Temp. current output 2	Isolated, 4 to 20mA output , max. load 500Ω	
Current output accuracy	±0.05 mA	
RS485	Mod bus RTU protocol	
Baud rate	9600/19200/38400	
Maximum relay contacts capacity	5A/250VAC,5A/30VDC	
Language selection	English/ Chinese	
Waterproof grade	IP65	
Power supply	From 90 to 260 VAC, power consumption < 4 watts, 50/60Hz	
Material	ABS	
Installation	panel/wall/pipe installation	
Size/Weight	144mm×144mm×104mm, 0.9Kg	



PHG-2091A Industrial PH&ORP Meter



1. Description

PH/ online industrial ORP meter (hereinafter referred to as instrument) is a water quality online monitor with microprocessor. The instrument configuration of different types, different constant ORP electrode and the different types of pH electrode for the water conductivity of solution, pH value and temperature value of continuous monitoring and control. Widely used in power plants, petrochemical, metallurgy, paper environmental protection, water treatment, electronics and other fields such as light industry. The power plant cooling water, supply water, saturated water, condensed water and boiler water, ion exchange, reverse osmosis EDL, seawater distillation water equipment, water and water quality monitoring and control.

The instrument adopts LCD liquid crystal display, intelligent English menu operation, with current or voltage output, free setting of measurement range, high and low limit alarm prompt and two sets of relay control switches, adjustable hysteresis range, automatic or manual temperature compensation.

2. Features

- ※ **Intelligent:** using single chip microprocessor to complete the value of the conductivity of PH, temperature measurement and compensation;
- ※ The man-machine dialogue menu operation structure, users follow the prompts on the screen can operate;
- ※ **The multi screen display and display parameters:** conductivity value, temperature and working condition;
- ※ **The software to set the output mode:** software 0 ~ 20mA or 4 ~ 20mA, 20 ~ 4mA output;
- ※ **The calibration of various optional;**
- ※ **The measuring range and limit alarm, set free, overrun alarm limit;**
- ※ **The two group of relay control, hysteresis control range is adjustable;**

※ **The password and service guide or self:** the user can modify the password, to avoid irrelevant personnel into the misoperation; provide technical support and customer service service contact method for the user.

3. Technical indexes

(1) Measuring range: PH: 0.01~14.00pH, ORP:-1999~+1999mV

Temp: 0~100°C (meter display temp, according to the sensor matched)

(2)Resolution: PH: 0.01pH

ORP: 0.1mV

Temp: 0.1°C

(3) Basic error of instrument: ORP: $\pm 1.0\%F \cdot S \pm 1$ unit, Temp: $\pm 0.3^\circ C$

pH: $\pm 0.05pH$

(4) Automatic or manual temperature compensation range for electronic units: 0~150°C (25°C as the basis)

(5) Automatic temperature compensation error of electronic unit: $\pm 0.3\%F \cdot S$

(6) Stability of electronic elements: $\pm 0.1\%F \cdot S \pm 1$ unit /24h

(7) Repeatability error of electronic unit: $\leq 0.1\%F \cdot S \pm 1$ unit

(8) Electronic unit alarm error: $\pm 1\%F \cdot S$

(10) Output current error of electronic unit: $\pm 1\%F \cdot S$

(11) Current output: 0~20mA(up load $<1.5K\Omega$)

4~20mA(up load $<750\Omega$) 20~4mA(up load $<750\Omega$)

(12) Two Relay contacts: 4A 250VAC, 4A 30VDC

(13) Power supply (Optional): 85~265VAC $\pm 10\%$, 50 ± 1 Hz, $\leq 3W$ 9~36VDC, $\leq 3W$

(14) Dimension: 96×96×130mm

(15) Installation mode: Panel type (Insertion type) Opening hole : 91×91mm

(16) Weight: 0.6kg

(17) Working environment

1) Ambient temp: -10~60°C

2) Relative humidity: less than 90%

3) There is no strong magnetic interference around the earth's magnetic field.

PHS-1705 Laboratory PH Meter

PHS-1705 is a PH meter with the most powerful functions and the most convenient operation on the market. In the aspects of the intelligence, the measuring property, the usage environment as well as the external structure, great improvement has been made, so the accuracy of the instruments is very high. It can be widely used for continuous monitoring of PH values of the solutions in thermal power plants, chemical fertilizer, alloy, environmental protection, pharmaceutical, biochemical, foodstuff, running water, etc.

Technical Indexes

Measuring range	pH	0.00...14.00
	mV	-1999...1999
	Temperature	-5°C---105°C
Resolution	pH	0.01pH
	mV	1mV
	Temperature	0.1°C
Electronic unit measurement error	pH	±0.01pH
	mV	±1mV
	Temperature	±0.3°C
pH calibration	Up to 3 points	
Isoelectric point	pH 7.00	
Buffer group	8 groups	
Power supply	DC5V-1W	
Size/Weight	200×210×70mm/0.5kg	
Monitor	LCD display	
pH input	BNC, impedance >10e+12Ω	
Temperature input	RCA(Cinch), NTC30 k Ω	
Data storage	Calibration data	
	198 measurements data (pH, mV each 99)	
Print function	Measurement results	
	Calibration results	
	Data storage	
Use environmental conditions	Temperature	5...40°C
	Relative humidity	5%...80%(Not condensate)
	Installation category	II
	Pollution level	2
	Altitude	<=2000 meters



PHS-1701 Portable pH Meter

PHS-1701 portable pH meter is a digital display PH meter, with LCD digital display, which can display PH and temperature values simultaneously. The instrument applies to the labs in junior college institutions, research institutes, environmental monitoring, industrial and mining enterprises and other departments or field sampling to determine the aqueous solutions' PH values and potential (mV) values. Equipped with ORP electrode, it can measure the solution's ORP (oxidation-reduction potential) value; equipped with the ion specific electrode, it can measure the electrode potential value of the electrode.

Technical Indexes

Measuring range	pH	0.00...14.00
	mV	-1999...1999
	Temp	-5°C---105°C
Resolution	pH	0.01pH
	mV	1mV
	Temp	0.1°C
Electronic unit measurement error	pH	±0.01pH
	mV	±1mV
	Temp	±0.3°C
pH calibration	1 point, 2 point, or 3 point	
Isoelectric point	pH 7.00	
Buffer solution	8 groups	
Power supply	DC6V/20mA ; 4 x AA/LR6 1.5 V or NiMH 1.2 V and chargeable	
Size/Weight	230×100×35(mm)/0.4kg	
Display	LCD	
pH input	BNC, resistor >10e+12Ω	
Temp input	RCA(Cinch), NTC30kΩ	
Data storage	Calibration data; 198 groups measurement data (99 groups for pH、mV each)	
Working condition	Temp	5...40°C
	Relative humidity	5%...80%(without condensate)
	Installation grade	II
	Pollution grade	2
	Altitude	≤2000m



DDG-2080Pro Industrial Conductivity&TDS&Salinity&Resistivity Meter

Instruments are used in industrial measuring of the temperature, conductivity, Resistivity, salinity and total dissolved solids, complete functions, stable performance, easy operation, low power consumption, safe and reliable, using matching analog conductivity electrode, can be widely used in thermal power generation, chemical industry, metallurgy, environmental protection, pharmaceutical, biochemical, food, tap water and other industrial occasions.

Technical Indexes

Functions	EC	Resistivity	Salinity	TDS
Measuring range	0.00uS-200mS	0.00-20.00 MΩ	0.00-80.00 g/L(ppt)	0-133000 ppm
Resolution	0.01/0.1/1	0.01	0.01	1
Accuracy	±2%F.S	±2%F.S	±2%F.S	±2%F.S
Temp. compensation	Pt 1000/NTC10K			
Temp. range	-10.0 to +130.0℃			
Temp. resolution	0.1℃			
Temp. accuracy	±0.2℃			
Matched electrode	DDG-0.01/DDG-0.1/DDG-1.0/DDG-10/DDG-30			
Ambient temperature range	0 to +70℃			
Storage temp.	-20 to +70℃			
Display	Back light, dot matrix			
Current output	4-20mA			
RS485	Mod bus RTU protocol			
Maximum relay contacts capacity	5A/250VAC,5A/30VDC			
Language selection	English/Chinese			
Waterproof grade	IP65			
Power supply	From 90 to 260 VAC, power consumption < 4 watts			
Installation	panel/wall/pipe installation			
Weight	0.9Kg			



DDG-2080S Industrial Conductivity Meter



Instruments are used in industrial measuring of the temperature, conductivity, Resistivity, salinity and total dissolved solids, such as waste water treatment, environmental monitoring, pure water, sea farming, food production process, etc.

Technical Indexes

Specifications	Details
Name	Online Conductivity Meter
Shell	ABS
Power supply	90 – 260V AC 50/60Hz
Current output	2 roads of 4-20mA (Conductivity .temperature)
Relay	5A/250V AC 5A/30V DC
Overall dimension	144×144×104mm
Weight	0.9kg
Communication Interface	Modbus RTU
Measure range	0~2000000.00 us/cm(0~2000.00 ms/cm) 0~80.00 ppt 0~9999.00 mg/L(ppm) 0~20.00MΩ -40.0~130.0°C
Accuracy	2% ±0.5°C
Protection	IP65

DDG-2519BT Explosion Conductivity Transmitter



Features:

- 1.High intellectualization: high precision AD conversion and single chip microcomputer adopted to complete electrical conductivity and temperature measurement, automatic temperature compensation, instrument self-check .
- 2.High reliability: double-high resistance input, optical coupler isolation output.
- 3.Electrical conductivity combined with temperature show on the same screen at same time, Using LED display modules with backlights, the data can be seen in the dark.
- 4.25C conversion: conduct 25C conversion on conductivity value at the current temperature and realize to display the conductivity value at 25C, which is particularly suitable for measurement of a variety of water quality for power plans.
- 5.Instrument stability with no crash fault: the watchdog program ensures that the instruments works continuously without a crash fault.
- 6.High protection level : waterproof and dust proof design, fastening outer shell and suitable for outdoor.
- 7.Original safety instrument RS485 communication.
- 8.Transmitter shell, compact structure.

Main parameter:

- 1.Measuring range:
0.01~20 μ S/cm (with 0.01 electrode) ,up to 100.0 μ S/cm at real condition;
0.1~200 μ S/cm (with 0.1 electrode) ,up to 1000.0 μ S/cm at real condition;
1.0~2000 μ S/cm (with 1.0 electrode) ,up to 10000.0 μ S/cm at real condition;
10~20000 μ S/cm (with 10.0 electrode) ,up to 10000.0 μ S/cm at real condition;
- 2.Temperature compensation: 0~100.0 $^{\circ}$ C(standard temp:25C)
- 3.Water sample:0~100C,0.6MPa
- 4.Accuracy: conductivity:+/-1.0FS; temperature+/-0.5C
- 5.Output:4-20mA(2 wires, 3 isolation for input, output and power supply)
6. Power supply: DC24V
- 6.Error of current output: $\leq \pm 0.5\%$ FS;
- 7.Protection:IP65,IP67(optional)
- 8.Explosion-proof: ExiaIICT6 Ga;
- 9.Working condition:ambient temperature:0~60 $^{\circ}$ C ,related humidity:<85%;

ECG-2090Pro Industrial Conductivity&TDS&Salinity&Resistivity Meter

Instruments are used in industrial measuring of the temperature, conductivity, Resistivity, salinity and total dissolved solids, complete functions, stable performance, easy operation, low power consumption, safe and reliable, using matching analog conductivity electrode, can be widely used in thermal power generation, chemical industry, metallurgy, environmental protection, pharmaceutical, biochemical, food, tap water and other industrial occasions.

Technical Indexes

Functions	EC	Resistivity	Salinity	TDS
Measuring range	0.00uS-200mS	0.00-20.00 MΩ-CM	0.00-80.00 g/L(ppt)	0-133000 ppm
Resolution	0.01/0.1/1	0.01	0.01	1
Accuracy	±2%F.S.	±2%F.S.	±2%F.S.	±2%F.S.
Temp. compensation	Pt 1000/NTC10K			
Temp. range	-10.0 to +130.0°C			
Temp. resolution	0.1°C			
Temp. accuracy	±0.2°C			
Matched electrode	DDG-0.01/DDG-0.1/DDG-1.0/DDG-10/DDG-30			
Ambient temperature range	0 to +70°C			
Storage temp.	-20 to +70°C			
Display	Back light, dot matrix			
Current output	4-20mA			
RS485	Mod bus RTU protocol			
Maximum relay contacts capacity	5A/250VAC,5A/30VDC			
Language selection	English/Chinese			
Waterproof grade	IP65			
Power supply	From 90 to 260 VAC, power consumption < 4 watts			
Installation	panel/wall/pipe installation			
Weight	0.9Kg			



DDG-2090A Industrial Conductivity Meter

Industrial online conductivity meter (hereinafter referred to as instrument) is a microprocessor-based water quality on-line monitor. The instrument is equipped with different types, different constant conductivity electrode, for the conductivity of the aqueous solution and temperature values for continuous monitoring and control. Widely used in power plants, petrochemical, metallurgy, paper, environmental water treatment, light industry and electronics and other fields. Such as power plant cooling water, make-up water, saturated water, condensate and water, ion exchange, reverse osmosis EDL, seawater distillation and other water equipment water and water quality monitoring and control.

Technical Indexes

1. Measuring range

Conductivity: 0 ~ 20 μ S/cm (K = 0.01);
20 ~ 200 μ S/cm (K = 0.1);
200 μ S/cm ~ 4 mS/cm (K = 1.0);
4 ~ 20.0 mS/cm (K = 10.0);
20 ~ 200.0 mS/cm; (K = 30.0);

TDS: 0 ~ 100000mg/L;

Temperature: 0 ~ 150 °C (instrument display temperature, the actual use according to the configuration electrode);

2. Resolution: Conductivity: 0.01 μ S/cm; 0.01 mS/cm;

TDS: 0.01 mg/L;

Temperature: 0.1 °C;

3. Instrument basic error: conductivity/TDS: $\pm 1.0\%$ F.S ± 1 word, temperature: ± 0.3 °C;

4. Electronic unit automatic or manual temperature compensation range: 0 ~ 150 °C (reference temperature 25 °C);

5. Electronic unit automatic temperature compensation error: $\pm 0.3\%$ F.S;

6. Electronic unit stability: $\pm 0.1\%$ F.S ± 1 word/24h;

7. Repeatability error of electronic unit: $\leq 0.1\%$ F.S ± 1 word;

8. Electronic unit alarm error: $\pm 1\%$ F.S;

9. Electronic unit output current error: $\pm 1\%$ F.S;

10. Signal output: 0 ~ 10mA (load resistance $<1.5K\Omega$);

4 ~ 20mA (load resistance $<750\Omega$);

11. Two sets of relay control contacts: 4A 250VAC, 4A 30VDC;

12. Power supply: 85 ~ 265VAC $\pm 10\%$, 50 ± 1 Hz, power ≤ 3 W;

9 ~ 36VDC, power ≤ 3 W (required to be scheduled);

13. Overall dimensions: 96 \times 96 \times 130mm;

14. Installation: plate mounted (embedded); hole size: 91 \times 91mm;

15. Instrument weight: 0.6kg;

16. Working environment:

1) Ambient temperature: -10 to 60 °C;

2) Relative humidity: not more than 90%;

3) No magnetic field interference except the earth's magnetic field.



DDS-1706 Laboratory Conductivity Meter

DDS-1706 is an improved conductivity meter; based on DDS-307 on the market, it is added with the automatic temperature compensation function, with high price-performance ratio. It can be widely used for continuous monitoring of conductivity values of the solutions in thermal power plants, chemical fertilizer, metallurgy, environmental protection, pharmaceutical industry, biochemical industry, foodstuff and running water.

Technical Indexes

Measuring range	Conductivity	0.00 μ S/cm...199.9 mS/cm
	TDS	0.1 mg/L ... 199.9 g/L
	Salinity	0.0 ppt...80.0 ppt
	Resistivity	0 Ω .cm ... 100M Ω .cm
	Temperature(ATC/MTC)	-5...105°C
Resolution	Conductivity	Automatic
	TDS	Automatic
	Salinity	0.1ppt
	Resistivity	Automatic
	Temperature	0.1°C
Electronic unit error	EC/TDS/Sal/Res	± 0.5 % FS
	Temperature	± 0.3 °C
Calibration	One point	
	9 preset standard solution (Europe, USA,China, Japan)	
Power supply	DC5V-1W	
Size/weight	220×210×70mm/0.5kg	
Monitor	LCD display	
Electrode input interface	Mini Din	
Data storage	Calibration data	
	99 measurements data	
Print function	Measurement results	
	Calibration results	
	Data storage	
Use environmental conditions	Temperature	5...40°C
	Relative humidity	5%...80%(Not condensate)
	Installation category	II
	Pollution level	2
	Altitude	≤ 2000 meters



DDS-1702 Portable Conductivity Meter

DDS-1702 Portable Conductivity Meter is an instrument used for the measurement of the conductivity of aqueous solution in the laboratory. It is widely used in petrochemical industry, bio-medicine, sewage treatment, environmental monitoring, mining and smelting and other industries as well as junior college institutions and research institutes. If equipped with conductivity electrode with the appropriate constant, it can also be used to measure the conductivity of pure water or ultra-pure water in electronic semiconductor or nuclear power industry and power plants.

Technical Indexes

Measure Range	Conductivity	0.00 $\mu\text{S}/\text{cm}$...199.9 mS/cm
	TDS	0.1 mg/L ... 199.9 g/L
	Salinity	0.0 ppt...80.0 ppt
	Resistivity	0 $\Omega.\text{cm}$... 100 $\text{M}\Omega.\text{cm}$
	Temperature (ATC/MTC)	-5...105 $^{\circ}\text{C}$
Resolution	Conductivity / TDS / salinity / resistivity	Automatic sorting
	Temperature	0.1 $^{\circ}\text{C}$
Electronic unit error	Conductivity	$\pm 0.5\%$ FS
	Temperature	$\pm 0.3\%$ $^{\circ}\text{C}$
Calibration	1 point	
	9 preset standards (Europe and America, China , Japan)	
Data storage	Calibration data	
	99 measurement data	
Power requirements	4xAA/LR6(No. 5 battery)	
Monitor	LED monitor	
Shell	ABS	



DOG-2082Pro Industrial Dissolved Oxygen Meter

Instruments are used in effluent treatment, pure water, boiler water, surface water, electroplate, electron, chemical industry, pharmacy, food production process, environmental monitoring, brewery, fermentation etc.

Technical Index

Measuring range	0.0~200.0%	0.00 to 20.00ppm
Resolution	0.1	0.1
Accuracy	±1%FS	±1%FS
Temp. compensation	Pt 1000/NTC22K	
Temp. range	-10.0 to +130.0°C	
Temp. compensation range	-10.0 to +130.0°C	
Temp. accuracy	±0.5°C	
Current range of electrode	-2.0 to +400 nA	
Accuracy of electrode current	±0.005nA	
Polarization	-0.675V	
Display	Back light, dot matrix	
DO current output1	Isolated, 4 to 20mA output , max. load 500Ω	
Temp. current output 2	Isolated, 4 to 20mA output , max. load 500Ω	
Current output accuracy	±0.05 mA	
RS485	Mod bus RTU protocol	
Maximum relay contacts capacity	5A/250VAC,5A/30VDC	
Cleaning setting	ON: 1 to 1000 seconds, OFF: 0.1 to 1000.0 hours	
One multi function relay	clean/period alarm/error alarm	
Language selection	English/Chinese	
Waterproof grade	IP65	
Power supply	From 90 to 260 VAC, power consumption < 4 watts, 50/60Hz	
Installation	panel/wall/pipe installation	
Weight	0.9Kg	



DOG-2082S Digital Dissolved Oxygen Meter



The transmitter can be used to display data measured by the sensor, so the user can get the 4-20mA analog output by transmitter's interface configuration and calibration. And it can make relay control, digital communications, and other functions a reality.

The product is widely used in sewage plant, water plant, water station, surface water, farming, industry and other fields.

Specification	Details
Measuring range	0~20.00 mg/L 0~200.00 % -10.0~100.0℃
Accuracy	±1%FS ±0.5℃
Size	144*144*104mm L*W*H
Weight	0.9KG
Material of outside shell	ABS
Waterproof Rate	IP65
Operation Temperature	0 to 100℃
Power Supply	90 – 260V AC 50/60Hz
Output	two-way analog output 4-20mA,
Relay	5A/250V AC 5A/30V DC
Digital Communication	MODBUS RS485 communication function, which can transmit real-time measurements
Warranty Period	1 year

DOG-2082YS Online Optical Dissolved Oxygen Meter



The transmitter can be used to display data measured by the sensor, so the user can get the 4-20mA analog output by transmitter's interface configuration and calibration. And it can make relay control, digital communications, and other functions a reality.

The product is widely used in sewage plant, water plant, water station, surface water, farming, industry and other fields.

Specification	Details
Measuring range	0~20.00 mg/L 0~200.00 % -10.0~100.0℃
Accuracy	±1%FS ±0.5℃
Size	144*144*104mm L*W*H
Weight	0.9KG
Material of outside shell	ABS
Waterproof Rate	IP65
Operation Temperature	0 to 100℃
Power Supply	90 – 260V AC 50/60Hz
Output	two-way analog output 4-20mA,
Relay	5A/250V AC 5A/30V DC
Digital Communication	MODBUS RS485 communication function, which can transmit real-time measurements
Warranty Period	1 year

DOG-2092Pro Industrial Dissolved Oxygen Meter

Instruments are used in effluent treatment, pure water, boiler water, surface water, electroplate, electron, chemical industry, pharmacy, food production process, environmental monitoring, brewery, fermentation etc.

Technical Index

Measuring range	0.0~200.0%	0.00 to 20.00ppm
Resolution	0.1	0.1
Accuracy	±1%FS	±1%FS
Temp. compensation	Pt 1000/NTC22K	
Temp. range	-10.0 to +130.0°C	
Temp. compensation range	-10.0 to +130.0°C	
Temp. accuracy	±0.5°C	
Current range of electrode	-2.0 to +400 nA	
Accuracy of electrode current	±0.005nA	
Polarization	-0.675V	
Display	Back light, dot matrix	
DO current output1	Isolated, 4 to 20mA output , max. load 500Ω	
Temp. current output 2	Isolated, 4 to 20mA output , max. load 500Ω	
Current output accuracy	±0.05 mA	
RS485	Mod bus RTU protocol	
Maximum relay contacts capacity	5A/250VAC,5A/30VDC	
Cleaning setting	ON: 1 to 1000 seconds, OFF: 0.1 to 1000.0 hours	
One multi function relay	clean/period alarm/error alarm	
Language selection	English/Chinese	
Waterproof grade	IP65	
Power supply	From 90 to 260 VAC, power consumption < 4 watts, 50/60Hz	
Installation	panel/wall/pipe installation	
Weight	0.9Kg	



DOG-2092A Industrial Dissolve Oxygen Meter

The Series of industrial oxygen meter (hereinafter referred to as instrument) is a water quality online monitor with microprocessor. Widely used in industrial water, domestic water and sewage treatment, and aquaculture, etc.. Continuous monitoring and control of oxygen content in aqueous solution.

Technique Indexes

1. Measuring range: DO: 0~20.00mg/L; Temperature: 0~60°C;
2. Basic error: DO: $\pm 0.2\text{mg/LFS}$; Temperature: $\pm 0.5^\circ\text{C}$
3. The temperature compensation range: 0~60°C;
4. The remain signal of electrode: <1%;
5. Response time(90%final): <60seconds(25°C) or <30seconds(35°C)
6. The stability : <2%FS every week(normal temperature and normal pressure)
7. Current output: 0~10mA(load resistance<1.5K Ω);
4~20mA(load resistance<750 Ω);
8. Two group of alarm relay: 4A 250VAC,4A 30VDC;
9. Power supply: 85-265VAC,50/60Hz, power consumption $\leq 2\text{W}$;
Or 24VDC, power consumption $\leq 2\text{W}$;

10. The dimension: 96×96×130mm;

11. Installation way: panel installation;

The tapping size of electronic unit : 91×91mm;

12. The electronic unit weight: 0.6kg;

13. Operating conditions: a)Ambient temperature : $-10\sim 60^\circ\text{C}$;b)Relative humidity: no bigger than 90%;c)There are no other magnetic fields or electromagnetic fields which produce the negative effect except the earth magnetic field.



DOS-1707 Laboratory Dissolved Oxygen Meter

DOS-1707 ppm level portable Desktop Dissolved Oxygen Meter is one of the electrochemical analyzers used in laboratory and a high-intelligence continuous monitor produced by our company. It can be equipped with the DOS-808F Polarographic Electrode, achieving a wide range ppm level automatic measurement. It is a special instrument used for testing the oxygen content of the solutions in the boiler feed water, condensate water, environmental protection sewage and other industries.

Technical indexes

Measuring range	DO	0.00--50.0mg/L
		0.0--500%
	Temp	0...60℃ (ATC/MTC)
	Atmosphere	300--1100hPa
Resolution	DO	0.01mg/L,0.1mg/L(ATC)
		0.1%/1%(ATC)
	Temp	0.1℃
	Atmosphere	1hPa
Electronic unit measurement error	DO	±0.5 % FS
	Temp	±0.2 ℃
	Atmosphere	±5hPa
Calibration	At most 2 point, (water vapor saturated air/zero oxygen solution)	
Power supply	DC6V/20mA; 4 x AA/LR6 1.5 V or NiMH 1.2 V and chargeable	
Size/Weight	230×100×35(mm)/0.4kg	
Display	LCD	
Sensor input connector	BNC	
Data storage	Calibration data; 99 groups measurement data	
Working condition	Temp	5...40℃
	Relative humidity	5%...80% (without condensate)
	Installation grade	II
	Pollution grade	2
	Altitude	≤2000m



DOS-1703 Portable Dissolved Oxygen Meter

DOS-1703 portable dissolved oxygen meter is outstanding for ultra-low power microcontroller measurement and control, low power consumption, high reliability, intelligent measurement, using polarographic measurements, without changing the oxygen membrane. Having reliable, easy (one-hand operation) operation, etc.; the instrument can display dissolved oxygen concentration in two kinds of measurement results indicates, mg / L (ppm) and the oxygen saturation percentage (%), in addition, measure the temperature of the measured medium simultaneously.

Technical indexes

Measuring range	DO	0.00--20.0mg/L 0.0--200%
	Temp	0...60℃ (ATC/MTC)
	Atmosphere	300--1100hPa
Resolution	DO	0.01mg/L,0.1mg/L(ATC) 0.1%/1%(ATC)
	Temp	0.1℃
	Atmosphere	1hPa
Electronic unit measurement error	DO	±0.5 % FS
	Temp	±0.2 ℃
	Atmosphere	±5hPa
Calibration	At most 2 point, (water vapor saturated air/zero oxygen solution)	
Power supply	DC6V/20mA; 4 x AA/LR6 1.5 V or NiMH 1.2 V and chargeable	
Size/Weight	230×100×35(mm)/0.4kg	
Display	LCD	
Sensor input connector	BNC	
Data storage	Calibration data; 99 groups measurement data	
Working condition	Temp	5...40℃
	Relative humidity	5%...80% (without condensate)
	Installation grade	II
	Pollution grade	2
	Altitude	≤2000m



CL-2059A Industrial Residual Chlorine Analyzer

CL-2059A is a total new industrial residual chlorine analyzer, with high intelligence, sensitivity. It can measure residual chlorine and temperature simultaneously. It is widely used in such industries as thermal power plant, running water, pharmaceutical, drinking water, water purification, industrial pure water, swimming pool disinfection residual chlorine continuous monitoring.

Features:

Highly intelligent: CL-2059A Industrial online residual chlorine analyzer adopts industry leading overall design concept of the core components to ensure high-quality, import instruments.

High and low alarm: hardware isolation, each channel can be arbitrarily chosen measurement parameters, can be hysteresis.

Temperature compensation: 0 ~ 50 °C automatic temperature compensation

Waterproof and dustproof: good sealing instrument.

Menu: Easy operation menu

Multi-screen display: There are three kinds of instrument display, user-friendly display for the different requirements.

Chlorine calibration: provide chlorine zero and slope calibration, clear menu design.

Technical indexes:

1. Measuring range

Residual chlorine: 0-20.00mg/L,	Resolution: 0.01mg/L;
Temperature: 0- 99.9 °C	Resolution: 0.1 °C

2.Accuracy: Chlorine: better than $\pm 1\%$ or $\pm 0.01\text{mg/L}$.

3.Temperature: better than $\pm 0.5\text{ }^{\circ}\text{C}$ (0 ~ 50.0 °C)

4.Minmum detection: 0.01mg /L

5.Repeatability Chlorine: $\pm 0.01\text{mg/L}$

6.Stability Chlorine: $\pm 0.01\text{ (mg/L) / 24h}$

7.Current isolated output: 4 ~ 20 mA(load <750 Ω) current output, measurement parameters can be selected independently (FAC, T)

8.Output current error: $\leq \pm 1\%$ FS

9. High and low alarm: AC220V, 5A, each channel can be selected independently measured parameters corresponding (FAC, T)

10.Alarm hysteresis: can be set according to the selected parameters

11.Communication: RS485 (optional)

12.Working environment: Temperature 0 ~ 60 °C, Relative humidity <85%

It can be convenient to computer monitoring and communication

13.Installation type: Opening type, panel mounted.

14.Dimensions: 96 (L) \times 96 (W) \times 118 (D) mm; Hole Size: 92x92mm

15.Weight: 0.5kg



Standard configuration:

chlorine analyzer, constant-current chlorine electrode, constant-current groove (3-hole), electrode cable (5m).

CL-201 Colorimetric Residual Chlorine Analyzer

Measurement principle:

Using DPD colorimetric method to detect the concentration of residual chlorine which is an measurement accurate, cost-effective and low maintenance instrument. It is suitable for the measurement of residual chlorine in chlorine disinfection process and monitoring of residual chlorine concentration in drinking water pipe network. Continuous operation 30 days of reagent dosage, realize unattended operation, operation and maintenance cost is low.

Features:

- ①The DPD standard colorimetric method
- ②The continuous operation of 30 days do not need to replace the reagent, simple operation, low operation and maintenance cost
- ③Two programmable relay, can set the concentration alarm
- ④It is suitable for measuring residual chlorine in tap water, circulating cooling water, sewage chlorination process of residual chlorine measurement and tap water pipe network.

Technical Indexes

Measure range	0~5ppm
Accuracy	±5% reading or ±0.03ppm Cl ₂ , take big
Detection limit	0.03mg/L
Display	70mm×48 mm LCD
Calibration	Use default calibration curves
Operation condition	Sample flow rate: 200-400mL/min Sample inlet pressure: 0.1~5bar Sample temperature:5~40°C
Power supply	220-230VAC, 50/60Hz
Output	4-20mA
Relay	Two groups of relays, can set the concentration alarm
Storage temperature range	-40~60°C
Storage humidity	humidity: 10-90%, non condensing
Size	460mm*350mm*186mm (L*W*H)
Weight	About 9KG
Installation	Wall hanging



CLG-2059S Online Residual Chlorine Analyzer

CLG-2059S residual chlorine analyzer can directly integrate the residual chlorine into a whole machine, and centrally observe and manage it on the controller; the system integrates water quality online analysis, database and calibration functions in one, and it is Chlorine data collection and analysis provide great convenience.

1. The integrated system can measure residual chlorine and temperature;
2. With original controller, it can output RS485 and 4-20mA signals;
3. Equipped with digital electrodes, plug and use, simple installation and maintenance;

Application field

Monitoring of chlorine disinfection treatment water such as swimming pool water, drinking water, pipe network and secondary water supply etc.

Technical Indexes

Model		CLG-2059S
Measurement configuration		Temp/residual chlorine
Measuring range	Temperature	0-60°C
	Residual chlorine analyzer	0-20mg/L (pH: 5.5-10.5)
Resolution and accuracy	Temperature	Resolution: 0.1°C Accuracy: ±0.5°C
	Residual chlorine analyzer	Resolution: 0.01mg/L Accuracy: ±2% FS
Working Environment	Temp: 0-50°C;	
Display	Back light, dot matrix	
Current output	4-20mA	
RS485	Mod bus RTU protocol	
Maximum relay contacts capacity	5A/250VAC,5A/30VDC	
Language selection	English/Chinese	
Waterproof grade	IP65	
Power supply	From 90 to 260 VAC, power consumption < 4 watts	
Installation	panel/wall/pipe installation	
Weight	0.9Kg	



CLG-2059S/P Online Residual Chlorine Analyzer

CLG-2059S/P residual chlorine analyzer can directly integrate the residual chlorine into a whole machine, and centrally observe and manage it on the controller; the system integrates water quality online analysis, database and calibration functions in one, and it is Chlorine data collection and analysis provide great convenience.

1. The integrated system can measure residual chlorine and temperature;
2. With original controller, it can output RS485 and 4-20mA signals;
3. Equipped with digital electrodes, plug and use, simple installation and maintenance;

Application field

Monitoring of chlorine disinfection treatment water such as swimming pool water, drinking water, pipe network and secondary water supply etc.

Technical Indexes

Model		CLG-2059S/P
Measurement configuration		Temp/residual chlorine
Measuring range	Temperature	0-60℃
	Residual chlorine analyzer	0-20mg/L (pH: 5.5-10.5)
Resolution and accuracy	Temperature	Resolution: 0.1℃ Accuracy: ±0.5℃
	Residual chlorine analyzer	Resolution: 0.01mg/L Accuracy: ±2% FS
Communication Interface	4-20mA /RS485	
Power supply	AC 85-265V	
Water flow	15L-30L/H	
Working Environment	Temp: 0-50℃;	
Total power	30W	
Inlet	6mm	
Outlet	10mm	
Cabinet size	600mm×400mm×230mm (L×W×H)	



CLG-6059T Online Residual Chlorine Analyzer

CLG-6059T residual chlorine analyzer can directly integrate the residual chlorine and pH value into a whole machine, and centrally observe and manage it on the touch screen panel display; the system integrates water quality online analysis, database and calibration functions. Water quality residual chlorine data collection and analysis provide great convenience.

1. The integrated system can detect pH, residual chlorine and temperature;
2. 10-inch color touch screen display, easy to operate;
3. Equipped with digital electrodes, plug and use, simple installation and maintenance;

Application field

Monitoring of chlorine disinfection treatment water such as swimming pool water, drinking water, pipe network and secondary water supply etc.

Model		CLG-6059T
Measurement configuration		PH/Temp/residual chlorine
Measuring range	Temperature	0-60℃
	pH	0-14pH
	Residual chlorine analyzer	0-20mg/L (pH: 5.5-10.5)
Resolution and accuracy	Temperature	Resolution: 0.1℃ Accuracy: ±0.5℃
	pH	Resolution: 0.01pH Accuracy: ±0.1 pH
	Residual chlorine analyzer	Resolution: 0.01mg/L Accuracy: ±2% FS
Communication Interface	RS485	
Power supply	AC 85-264V	
Water flow	15L-30L/H	
Working Environment	Temp: 0-50℃;	
Total power	50W	
Inlet	6mm	
Outlet	10mm	



pXG-2085Pro Online Ion Analyzer

Widely used in industrial measuring of the temperature and ion, such as waste water treatment, environmental monitoring, electroplate factory, etc.

Functions	ION(F ⁻ , CL ⁻ , Mg ²⁺ , Ca ²⁺ , NO ³⁻ , NH ⁴⁺ etc)
Measuring range	0-20000ppm or 0-20ppm
Resolution	1ppm /0.01ppm
Accuracy	+/-1ppm, +/-0.01ppm
Voltage input range	0.00-1000.00mV
Temp. compensation	Pt 1000/NTC10K
Temp. range	-10.0 to +130.0°C
Temp. Compensation range	-10.0 to +130.0°C
Temp resolution	0.1°C
Temp. accuracy	±0.2°C
Ambient temperature range	0 to +70°C
Storage temp	-20 to +70°C
Input impedance	>10 ¹² Ω
Display	Back light, dot matrix
ION current output1	Isolate, 4 to 20mA output, max load 500Ω
Temp. current output 2	Isolate, 4 to 20mA output, max load 500Ω
Current output accuracy	±0.05 mA
RS485	Modbus RTU protocol
Baud rate	9600/19200/38400
MAX.relay contacts capacity	5A/250VAC , 5A/30VDC
Cleaning setting	On: 1 to 1000 seconds, Off: 0.1 to 1000.0 hours
One multi-function relay	clean/period alarm/error alarm
Relay delay	0-120 seconds
Data logging capacity	500,000 data
Language selection	English/traditional Chinese/simplified Chinese
USB port	Download records and update program
IP Rating	IP65
Power supply	From 90 to 260 VAC, power consumption < 5 watts
Installation	panel/wall/pipe installation
Weight	0.85Kg



AH-800 Online Water Hardness/Alkali Analyzer



Online Water hardness / alkali analyzer monitors water total hardness or carbonate hardness and total alkali fully automatically via titration.

Description

This analyzer can measure water total hardness or carbonate hardness and total alkali fully automatically via titration. This instrument is suitable for recognising levels of hardness, quality control of water softening facilities and monitoring of water blending facilities. The instrument allows two different limit values to be defined and checks the water quality by determining the absorption of the sample during titration of the reagent. The configuration of the many applications is supported by a configuration assistant.

Features

- ◇ Reliable, exact and fully automatic analysing
- ◇ Simple commissioning with configuration assistant
- ◇ Self calibrating and self monitoring
- ◇ High measuring accuracy
- ◇ Easy maintenance and cleaning.
- ◇ Minimal reagent and water consumption
- ◇ Multi-coloured and multi-lingual graphic display.
- ◇ 0/4-20mA/relay/CAN-interface output

Hardness Reagents & Measurement Ranges

Reagent type	°dH	°F	ppm CaCO ₃	mmol/l
TH5001	0.03-0.3	0.053-0.534	0.534-5.340	0.005-0.053
TH5003	0.09-0.9	0.160-1.602	1.602-16.02	0.016-0.160
TH5010	0.3-3.0	0.534-5.340	5.340-53.40	0.053-0.535
TH5030	0.9-9.0	1.602-16.02	16.02-160.2	0.160-1.602
TH5050	1.5-15	2.67-26.7	26.7-267.0	0.267-2.670
TH5100	3.0-30	5.340-53.40	53.40-534.0	0.535-5.340

Alkali Reagents & Measurement Ranges

Reagents model	Measuring rang
TC5010	5.34~134 ppm
TC5015	8.01~205ppm
TC5020	10.7~267ppm
TC5030	16.0~401ppm

Specifications

Measurement method	Titration method
Water inlet in general	clear, colourless, free of solid particles, without gas bubbles
Measurement range	Hardness : 0.5-534ppm , total alkali:5.34~401ppm
Accuracy	+/- 5%
Repetition	±2.5%
Environmental temp.	5-45°C
Measuring water temp.	5-45°C
Water inlet pressure	ca. 0.5 - 5 bar (max.) (Recommended 1 - 2 bar)
Analysis start	- programmable time intervals (5 - 360 minutes) - external signal - programmable volume intervals
Flush time	programmable flush time (15 - 1800 seconds)
Output	- 4 x potential-free Relays (max. 250 Vac / Vdc; 4A (as potential free output NC/NO)) - 0/4-20mA - CAN interface
Power	90 - 260 Vac (47 - 63Hz)
Power consumption	25 VA (in operation), 3.5 VA (stand by)
Dimensions	300x300x200 mm (WxHxD)
Protection grade	IP65

TBG-2088S Online Turbidity Meter



The transmitter can be used to display data measured by the sensor, so the user can get the 4-20mA analog output by transmitter's interface configuration and calibration. And it can make relay control, digital communications, and other functions a reality. The product is widely used in sewage plant, water plant, water station, surface water, farming, industry and other fields.

Technical Parameters

Measuring range	0~100NTU, 0-4000NTU
Accuracy	±2%
Size	144*144*104mm L*W*H
Weight	0.9kg
Shell Material	ABS
Operation Temperature	0 to 100℃
Power Supply	90 – 260V AC 50/60Hz
Output	4-20mA
Relay	5A/250V AC 5A/30V DC
Digital Communication	MODBUS RS485 communication function, which can transmit real-time measurements
Waterproof Rate	IP65
Warranty Period	1 year

TBG-2088S/P Online Turbidity Analyzer

TBG-2088S/P turbidity analyzer can directly integrate the turbidity inside the whole machine, and centrally observe and manage it on the touch screen panel display; the system integrates water quality online analysis, database and calibration functions in one, Turbidity data collection and analysis provide great convenience.

1. Integrated system, can detect turbidity;
2. With original controller, it can output RS485 and 4-20mA signals;
3. Equipped with digital electrodes, plug and use, simple installation and maintenance;
4. Turbidity intelligent sewage discharge, without manual maintenance or reducing the frequency of manual maintenance;

Application field

Monitoring of chlorine disinfection treatment water such as swimming pool water, drinking water, pipe network and secondary water supply etc.

Technical Indexes

Model		TBG-2088S/P
Measurement configuration		Temp/turbidity
Measuring range	Temperature	0-60°C
	turbidity	0-20NTU
Resolution and accuracy	Temperature	Resolution: 0.1°C Accuracy: ±0.5°C
	turbidity	Resolution: 0.01NTU Accuracy: ±2% FS
Communication Interface	4-20mA /RS485	
Power supply	AC 85-265V	
Water flow	< 300mL/min	
Working Environment	Temp: 0-50°C;	
Total power	30W	
Inlet	6mm	
Outlet	16mm	
Cabinet size	600mm×400mm×230mm (L×W×H)	



BNTU-1000 Portable Turbidity Meter

The portable turbidity analysis consists of mainframe and turbidity sensor. The infrared scattering light technology can eliminate the influence of the color of the sample. The turbidity sensor is provided with a scattered light receiver in the 90° direction, and the turbidity value is obtained by analyzing the intensity of the set of scattered light. Ergonomic curve design with rubber washers, suitable for hand-held operation, easy to grasp in wet environment, factory calibration, no calibration required in one year, can be calibrated on site; digital sensor, convenient and fast on-site, and plug-and-play with the host use. With USB interface, it can charge the built-in battery and export data through USB interface. It is widely used in on-site portable monitoring of water turbidity in sewage treatment, surface water, industrial and agricultural water supply and drainage, domestic water, boiler water quality, universities, scientific research units, swimming pools, aquaculture and other fields.

Technical Indexes

Measuring Range	0.1-1000 NTU
Measurement Accuracy	0.1-10NTU: ± 0.3 NTU
Resolution	0.1NTU
Calibration	Standard Calibration, Water Calibration
Housing Material	Sensor: SUS316L Host housing: ABS+PC
Storage Temp.	-15-50°C
Operating Temp.	0-45°C
Size & Weight	Sensor Size: 24mm * 135mm weight: <0.25KG Host size: 203*100*43mm, weight: 0.5KG
Protection Level	Sensor IP68 Host housing: IP67
Cable Length	Standard 3 meter cable (can be extended)
Display	3.5-inch color display screen with adjustable backlight
Data Storage	500M



TSG-2087S Industrial Total Suspended Solids (TSS) Meter



The transmitter can be used to display data measured by the sensor, so the user can get the 4-20mA analog output by transmitter's interface configuration and calibration. And it can make relay control, digital communications, and other functions a reality. The product is widely used in sewage plant, water plant, water station, surface water, farming, industry and other fields.

Technical Parameters

Measuring range	0~1000mg/L, 0~99999 mg/L, 99.99~120.0 g/L
Accuracy	±2%
Size	144*144*104mm L*W*H
Weight	0.9kg
Shell Material	ABS
Operation Temperature	0 to 100°C
Power Supply	90 – 260V AC 50/60Hz
Output	4-20mA
Relay	5A/250V AC 5A/30V DC
Digital Communication	MODBUS RS485 communication function, which can transmit real-time measurements
Waterproof Rate	IP65
Warranty Period	1 year

MLSS-1708 Portable Suspend Solid Analyzer



Principle:

The portable suspended solid (sludge concentration) analyzer consists of a host and a suspension sensor. The sensor is based on a combined infrared absorption scatter ray method, and the ISO 7027 method can be used to continuously and accurately determine the suspended matter (sludge concentration). The suspended matter (sludge concentration) value was determined according to ISO 7027 infrared double scattering light technology without chromatic influence.

Application

Widely used in on-site portable monitoring of water suspended solids in sewage treatment, surface water, universities, research institutes, etc.

Main features

- 1) Portable host IP66 protection level
- 2) Ergonomic curve design with rubber washers for hand-held operation, easy to grasp in wet conditions
- 3) Factory calibration, no calibration required in one year, can be calibrated on site;
- 4) Digital sensor, easy to use and fast in the field, and plug and play with portable host.
- 5) With USB interface, it can charge the built-in battery and export data through USB interface

Specification

- 1) Measuring range 0.1-20000 mg/L, 0.1-45000 mg/L
- 1) Measurement accuracy is less than $\pm 5\%$ of the measured value (depending on sludge homogeneity)
- 3) Resolution 0.1mg/L
- 4) Calibration standard calibration, water sample calibration
- 5) Housing Material Sensor: SUS316L
- 6) Portable main unit casing: ABS+PC
- 7) Operating temperature 1 to 45 ° C
- 8) Size/weight Sensor size: diameter 60mm* length 256mm weight: 1.65KG
- 9) Portable main unit size: 203*100*43mm, weight: 0.5KG
- 10) Protection level Portable host IP66; sensor IP68
- 11) Cable length Standard 3 meter cable (expandable)
- 12) Display 3.5-inch color display screen with adjustable backlight
- 13) Data storage 8G data storage space

SJG-2083CS Online Acid Alkaline Concentration/Conductivity Meter

The brand-new online intelligent digital instrument manufactured covers the measurement of conductivity and the concentration of various solutions of sodium chloride, hydrochloric acid, nitric acid, sodium hydroxide, and dilute/concentrated sulfuric acid. This instrument communicates with the sensor through RS485 (ModbusRTU), which has the characteristics of rapid communication and accurate data. Complete functions, stable performance, easy operation, low power consumption, safety and reliability are the outstanding advantages of this instrument.

This meter uses the matching digital acid-alkaline concentration electrode, which can be widely used in thermal power generation, chemical industry, ion exchange method to produce high-purity water concentration in the regeneration solution, or used to configure the boiler pipe pickling solution, to control the acid-alkaline salt concentration in the solution Continuous monitoring.

1.Measurement range: Conductivity: 0-20ms/cm, 0-200ms/cm, 0-2000ms/cm

HNO₃: 0~25.00%;

H₂SO₄: 0~25.00% \ 92%~100%

HCL: 0~20.00% \ 25~40.00)%;

NaOH: 0~15.00% \ 20~40.00)%;

2.Accuracy: ±2%F.S;

3.Resolution: 0.01%;

4.Repeatability: <1%;

5.Temperature sensors: Pt1000 etc;

6.Temperature compensation range: 0~100°C;

7.Output: 4-20mA, RS485(optional)

8.Alarm relay: 2 normally open contacts are optional, AC220V 3A /DC30V 3A;

9.Power supply: AC(85~265) V Frequency (45~65)Hz;

10.Power: ≤15W;

11.Overall dimension: 144 mm×144 mm×104 mm; Hole size: 138 mm×138 mm;

12.Weight: 0.64kg;

13Protection level: IP65;



GS GG-5089Pro Industrial Silicate Meter

GS GG-5089Pro Industrial Online Silicate meter, is an instrument can finish automatically chemical reaction, optical detection, graphic display, control output, and data storage capabilities, high-precision online automatic instrumentation; It adopts a unique air mixing and photoelectric detection technology, it has a high chemical reaction speed and high measurement accuracy superior characteristics; it has a color LCD display, with rich colors, text, charts and curves, etc., to display the measurement results, system information and a full English menu operation interface; humanized design concept and high-tech fully integrated, highlights the advantages of the instrument and product competitiveness.

Features

1. Low detection limit, very suitable for power plant water feed, saturated steam and superheated steam silicon content detection and control;
2. Long life light source, using cold monochrome light source;
3. Historical curve recording function, can store 30 days of data;
4. Automatic calibration function, period arbitrarily set;
5. Support multi-channel measurements in water samples, optional 1-6 channels;
6. Achieve a maintenance-free, except adding reagents, guide standards.

Technical Indexes

1. Measuring range: 0~20ug/L, 0~100ug/L, 0-2000ug/L
2. Accuracy: $\pm 1\%$ F.S
3. Repeatability: $\pm 1\%$ F.S
4. Stability: Drift $\leq \pm 1\%$ F.S / 24hours
5. Response time: the initial response is 12 minutes
6. Sampling period: about 10 minutes / Channel
7. Watery conditions: Flow: > 100 ml / min
Temperature: 10 ~ 45 °C
Pressure: 10 kPa ~ 100 kPa
8. Environmental conditions: Temperature: 5 ~ 45 °C, Humidity: <85% RH
9. Reagent consumption: Three kinds reagents, about 3 liters / month for each kind.
10. Current output: 4 ~ 20mA arbitrarily set within this range, multi-channel meter, channel independent output
11. Alarm output: normally open relay contacts 220V/1A
12. Power supply: AC220V $\pm 10\%$ 50HZ
13. Power consumption: ≈ 50 W
14. Dimensions: 720mm (height) \times 460mm (width) \times 300mm (depth)
15. Hole size: 665mm \times 405mm



LSGG-5090 Industrial Phosphate Analyzer

LSGG-5090 type industrial online phosphate analyzer, adopts special air bubbling and optoelectronics examination technique, make chemical react quickly and measure accuracy outstanding, optoelectronics examination and chart text display. Adopt colorful liquid crystal display, with the prolific color, character, chart and curve etc.

Can be widely used in thermal power plants, chemical industry and other departments, timely and accurate phosphate content of the water is monitoring to ensure crew working safely, economic, especially for the scene environment.

Features

1 ~ 6 channels to for optional, cost savings.

High accuracy, fast response.

Regular automatic calibration, maintenance workload is small.

Color LCD real-time curve, convenient for analysis working condition.

Save a month of historical data, easy recall.

Monochromatic cold light source, long life, good stability.

Multiple-precision programmable current output, suitable for subsequent automatic dosing or data acquisition system.

Technical indexes

1. Measuring principle: phosphorus molybdenum alum yellow photoelectric colorimetry
2. Measuring range: 0 ~ 2000 μ g / L, 0 ~ 10mg / L optional
3. Accuracy: $\pm 1\%$ F.S
4. Reproducibility: $\pm 1\%$ F.S
5. Stability: drift $\leq \pm 1\%$ F.S/24 hour
6. Response time: initial response, four minutes, six minutes to reach at least 98%
7. Sampling period: 3 minutes / Channel
8. Watery conditions: Flow > 2 ml / sec.
Temperature: 10 ~ 45 $^{\circ}$ C
Pressure: 10kPa ~ 100kPa
9. Ambient temperature: 5 ~ 45 $^{\circ}$ C (higher than 40 $^{\circ}$ C, reduced accuracy)
10. Environment humidity: <85% RH
11. Reagent types: one kind
12. Reagent consumption: about 3 liters / month
13. Output signal: 0 ~ 22mA within range of any set, each channel isolation
14. Alarm: buzzer, relay normally open contacts
15. Power: 220V $\pm 10\%$, 50Hz $\pm 1\%$ 50W Main features
16. Dimensions: 720mm (height) \times 460mm (width) \times 300mm (depth)
17. Hole size: 665mm \times 405mm



DWG-5088Pro Industrial Online Sodium Meter

DWG-5088Pro Industrial Sodium Meter is a brand new continuous monitoring instrument for micro-sodium ions at ppb level. With professional ppb level measuring electrode, automatic constant-voltage constant-current fluid line system and stable and efficient basification system, it provides stable and accurate measurement. It can be used for continuous monitoring over sodium ions in water and solution in thermal power stations, chemical industry, chemical fertilizer, metallurgy, environmental protection, pharmacy, biochemical engineering, foodstuff, running water supply and many other industries.

Features

LCD display in English, menu in English and notepad in English.

High reliability: Single-board structure, touch keys, no switch knob or potentiometer. Rapid response, accurate measurement and high stability.

Automatic constant-voltage constant-current liquid line system: Automatic compensation for flow and pressure of water sample.

Alarm: Isolated alarm signal output, discretionary setting of upper and lower thresholds for alarming, and lagged cancellation of alarming.

Network function: Isolated current output and RS485 Communication Interface.

History curve: It can continuously record data for a month, with a point for each five minutes.

Notepad function: Recording 200 messages.

Technical Indexes

1.Measuring range : 0 ~ 100ug / L, 0 ~ 2300mg /L

Resolution : 0.1 μg / L, 0.01mg/L0.00pNa-8.00pNa

Resolution : 0.01pNa0 ~ 60 °C Resolution : 0.1 °C

2.The basic error : $\pm 2.5\%$, ± 0.3 °C temperature

3.Automatic temperature compensation range : 0 ~ 60 °C, 25 °C basis

4.The electronic unit temperature compensation error : $\pm 2.5\%$

5.The electronic unit repeatability error : $\pm 2.5\%$ of reading

6. Stability: reading $\pm 2.5\%$ / 24h

7.The input current : $\leq 2 \times 10^{-12}\text{A}$ Tested water samples : 0 ~ 60 °C, 0.3MPa

8.The clock accuracy: ± 1 minute / month

9.The output current error : $\leq \pm 1\%$ FS

10.Data storage Quantity: 1 month (1:00 / 5 minutes)

11.Alarm normally open contacts : AC 250V, 7A

12.Power supply : AC220V $\pm 10\%$, 50 $\pm 1\text{Hz}$

13.Isolated output : 0 ~ 10mA (load $<1.5\text{k}\Omega$), 4 ~ 20mA (load $<750\Omega$)

14.Dimensions: 440 (W) * 770 (H) * 234 (D) mm, hole size: 390 (W) * 650 (H) mm

Positioning holes : 280 (W) * 730 (H) mm, pore size : $\phi 12$, four-hole distribution

Alarming relay: AC220V, 3A, isolated output of alarming signals

Aperture : $\phi 12$, four-hole distribution (unless otherwise noted , the products in accordance with the size of the opening hole)

15. Weight : 20kg

16.Working conditions: ambient temperature: 0-60°C; relative humidity $<85\%$



DCSG-2099 Multi-parameter Online Analyzer

DCSG-2099 multi-parameter Online analyzer can simultaneously measure: conductivity, TDS, resistivity, temperature, pH, ORP, dissolved oxygen, oxygen saturation, chlorine, total of nine parameters. The channels are independent, non-switch conversion, without disturbing each other.

Features :

Menu: menu structure, similar to computer operation, simple, prompt, easy use.

Current isolated output: six independent 4 ~ 20mA current, coupled with optical isolation technology, strong anti-jamming capability, remote transmission.

RS485 communication interface: can be easily linked to computer for monitoring and communication.

Automatic temperature compensation: 0 ~ 99.9 ° C Automatic Temperature Compensation.

Waterproof and dustproof design: protection class IP65, suitable for outdoor use.

Technical Parameters :

1. Display: LCD display, menu
2. Conductivity : Electrode constant $\times (1 \sim 3000) \mu S / cm$, 0 ~ 99.9 ° C
0.01 ~ 30 $\mu S/cm$; (electrode constant $K = 0.01$)
0.1 ~ 300 $\mu S/cm$; (electrode constant $K = 0.1$)
1.0 ~ 3000 $\mu S/cm$; (electrode constant $K = 1.0$)
10 ~ 30000 $\mu S/cm$; (electrode constant $K = 10.0$)
3. Conductivity accuracy : $\pm 0.5\%$ FS, ± 0.3 ° C
4. PH measuring range : (0.00 ~ 14.00) pH;
Electronic unit basic error : ± 0.02 pH
5. The basic error of the instrument : ± 0.05 pH
6. The temperature range : 0 ~ 99.9 ° C; electronic unit basic error : 0.3 ° C
7. The basic instrument error : 0.5 ° C (0.0 ° C $\leq T \leq 60.0$ ° C); another range 1.0 ° C
8. Dissolved oxygen measuring range : 0 ~ 100.0 $\mu g / L$, 0.00 ~ 20.00mg / L
Saturation : 0.0 to 200.0%
9. The whole basic error : $\mu g / L$: $\pm 1.0\%$ FS; mg / L: $\pm 0.5\%$ FS; Temperature : ± 0.5 ° C
10. TDS measuring range : 0.000 ~ 999.9 mg / L, 1.000 g / L ~ 19.99 g / L
11. The electronic unit basic error : $\pm 1.0\%$ (FS); Instrument basic error : $\pm 2.0\%$ (FS)
12. Resistivity: Measuring range : 0 ~ 20.00 M $\Omega \cdot cm$
13. The electronic unit basic error : $\pm 1.0\%$ (FS); Instrument basic error : $\pm 2.0\%$ (FS)
14. Each channel Independently: Each channel data measure simultaneously
15. Conductivity, temperature , pH, dissolved oxygen with the screen display, switch to display the other data.
16. Current isolated output: each parameter independently 4 ~ 20mA (load $< 750 \Omega$) ()
17. Power : AC220V ± 22 V, 50Hz ± 1 Hz, can be equipped with DC24V
18. RS485 communication interface (optional) () with " $\sqrt{\quad}$ " indicating output
19. Protection: IP65
20. The working conditions : ambient temperature 0 ~ 60 ° C, relative humidity $\leq 90\%$
21. The entire instrument Weight : 4.0 kg
Dimensions : 146 \times 146 \times 108mm, hole size : 138 * 138mm



MPG-6099 Multi-parameter Analyzer



Wall-mounted multi-parameter MPG-6099, optional water quality routine detection parameter sensor, including temperature/PH/conductivity/dissolved oxygen/turbidity/BOD/COD/ammonia nitrogen / nitrate/colour/chloride / depth etc, achieve simultaneous monitoring function. MPG-6099 multi-parameter controller has data storage function, which can monitor the fields: secondary water supply, aquaculture, river water quality monitoring, and environmental water discharge monitoring.

Dimensions

The wall-mounted multi-parameter meter is made of plastic and has a transparent cover.

Appearance dimensions are: 320mm x 270mm x 121 mm, waterproof rating IP65.

Display: 7 inch touch screen

Technical Indexes

1. Power supply: 220V/24V power supply
2. Signal output: RS485 signals , one external wireless transmission.
3. PH: 0~14pH, resolution 0.01pH, accuracy $\pm 1\%$ FS
4. Conductivity: 0 ~ 5000us/cm, resolution 1us / cm, accuracy $\pm 1\%$ FS
5. Dissolved oxygen: 0 ~20mg / L, resolution 0.01mg / L, accuracy $\pm 2\%$ FS
6. Turbidity: 0 ~ 1000NTU, resolution 0.1NTUL, accuracy $\pm 5\%$ FS
7. Temperature: 0-40 °C

8. Ammonia: 0-100mg/L($\text{NH}_4\text{-N}$), resolution: $<0.1\text{mg/L}$, accuracy: $<3\%\text{FS}$
9. BOD: 0-50mg/L, resolution: $<1\text{mg/L}$, accuracy: $<10\%\text{FS}$
10. COD: 0-1000mg/L, resolution: $<1\text{mg/L}$, accuracy: $\pm 2\%+5\text{mg/L}$
11. Nitrate: 0-50mg/L, 0-100mg/L(NO_3), resolution: $<1\text{mg/L}$, accuracy: $\pm 2\%+5\text{mg/L}$
12. Chloride: 0-1000mg/L(Cl), resolution: $\leq 0.1\text{mg/L}$
13. Depth: 76M, accuracy $\pm 5\%\text{FS}$, resolution: $\pm 0.01\%\text{FS}$
14. Colour: 0-350 Hazen/Pt-Co, resolution: $\pm 0.01\%\text{FS}$

Application

secondary water supply, aquaculture, river water quality monitoring, and environmental water discharge monitoring.



environmental water discharge



river water quality monitoring



aquaculture

CODG-3000 Industrial COD Analyzer

CODG-3000 type COD automatic industrial online analyzer is developed with completely independent intellectual property rights of COD automatic testing instrument, be able to automatically detect COD of any water for a long time that in unattended condition.

Features

The unique design makes this products compared to similar products with lower failure rate, lower maintenance, lower reagent consumption and higher cost.

Injection components: vacuum suction peristaltic pump, and the pump tube between the reagent there is always an air buffer, to avoid corrosion of the tubing, while making reagent mixing more concise and flexible.

Sealed Digestion components: high –temperature high-pressure digestion system, accelerating the reaction process, to overcome the volatile corrosive gas exposure system equipment corrosion.

Reagent tube: imported transparent modified PTFE hose, diameter greater than 1.5mm, reducing the chance of water-like particles clogging.

Technical Parameters

1. A method based on : the national standard GB11914-89 << Water Quality - Determination of the chemical oxygen demand - dichromate potassium >>
2. Measuring range :0-1000mg/L, 0-10000mg/L
3. Accuracy: $\geq 100\text{mg / L}$, no more than $\pm 10\%$;
 $<100\text{mg / L}$, no more than $\pm 8\text{mg / L}$
4. Repeatability : $\geq 100\text{mg / L}$, no more than $\pm 10\%$;
 $<100\text{mg / L}$, does not exceed $\pm 6\text{mg / L}$
5. Measurement period : The minimum measurement period of 20 minutes , according to the actual water samples, digestion can be modified at any time in the 5 ~ 120min;
6. sampling period : time interval (20 ~ 9999min adjustable) ,
and the whole point of measurement mode;
7. Calibration cycle : 1 to 99 days at any arbitrary time interval adjustable;
8. Maintenance cycle : general once a month, each about 30 min;
9. Reagent consumption : less than 0.35 RMB / sample
10. Output : RS-232 ,4-20mA (optional);
11. Environmental requirements : Temperature adjustable interior ,
recommended temperature $+5 \sim 28\text{ }^{\circ}\text{C}$; humidity $\leq 90\%$ (non-condensing);
12. Power supply : $\text{AC}230 \pm 10\% \text{ V}$, $50 \pm 10\% \text{ Hz}$, 5A;
13. Size: 1500 × width 550 × height depth 450 (mm);
14. Other : Abnormal alarm and power without losing data;
15. Touch screen display and command input , abnormal reset and power calls , the instrument automatically discharge the residual reactants , automatic return to work status.



NHNG-3010 Industrial Ammonia Analyzer



Features

NHNG-3010 type NH₃-N Automatic on-line analyzer is developed with completely independent intellectual property rights of ammonia (NH₃ - N) automatic monitoring instrument, is the world's only instrument which using advanced flow injection analysis technology to realize ammonia online analysis, and it can automatic monitoring the NH₃-N of any water in a long term of unattended. It can measure the very low and very high concentration of ammonia nitrogen, suitable for laboratory or field rapid on-line analysis of rivers and lakes water, tap water, waste water, high concentration of ammonia nitrogen content in the sewage and various kinds of solution.

1. The most advanced technique of flow injection analysis and the most safe and convenient analysis method.
2. Unique automatic enrichment function, make the instrument has a large measurement range
3. Reagents are non-toxic, just dilute NaOH and containing pH indicator distilled water, which can be easily formulated. The cost of analysis only 0.1 cents for each sample.
4. Unique gas-liquid separator (patented) make sample abandon the cumbersome and expensive former processing device, don't need to clean the equipment, is now the most simplified instrument in a variety of similar products.
5. Operating costs and maintenance costs are extremely low.
6. Of ammonia nitrogen concentration is greater than 0.2 mg/L samples, can use ordinary distilled

water as the solvent of reagent, easy to use.

The working principle of the novel instrument

Peristaltic pump delivery release liquid (loose) NaOH solution for current carrying liquid, turn set according to the number of sample injection valve, formation of NaOH solution and mixed water sample interval, when the mixed zone after the separation of the gas-liquid separator chamber, release samples of ammonia, ammonia gas through a gas liquid separation membrane were receiving liquid (BTB acid-base indicator solution), ammonium ion make the solution pH, color changed from green to blue. Ammonium concentration after accept the liquid to be delivered to the circulation of colorimeter pool, measuring its optical voltage change value, NH₃ - N content in the samples can be obtained.

Technical indexes

Measuring rang: 0.05-1500mg/L

Accuracy: 5%FS

Precision: 2%FS

The detection limit: 0.05 mg/L

Resolution: 0.01mg/L

The shortest measuring cycle: 5min

Dimension of the hole: 620×450×50mm

Weight: 110Kg

Power supply: 50Hz 200V

Power: 100W

Communication interface: RS232/485/4-20mA

Alarm Excessive, fault: Automatic alarm

Instrument calibration: Automatic

TNG-3020 Industrial Total Nitrogen Analyzer

The sample to be tested does not require any pretreatment. The water sample riser is directly inserted into the system water sample and the total nitrogen concentration can be measured. The maximum measurement range of the equipment is 0~500mg/L TN. This method is mainly used for on-line automatic monitoring of the total nitrogen concentration of waste (sewage) water discharge point source, surface water, etc.

Technical Indexes

1. Methods: Resorcinol spectrophotometry
2. Measuring range: 0.0 ~10mg/L、0.5~100 mg/L、5~500 mg/L
3. Stability:≤10%
4. Repeatability:≤5%
5. Measurement period: minimum measuring period of 30 min, according to actual water samples, can be modified at 5 ~ 120min arbitrary digestion time.
6. Sampling period: the time interval (10 ~ 9999min adjustable) and the whole point of measurement mode.
7. Calibration period: 1~99 days, any interval, any time adjustable.
8. Maintenance period: once a month, each about 30 min.
9. Reagent for value-based management: Less than 5 yuan/samples.
10. Output: two channel RS-232, two channel 4-20mA
11. Environmental requirement: temperature adjustable interior, it is recommended temperature 5~28°C; humidity≤90%(no condensing)
12. Power supply: AC230±10%V, 50±10%Hz, 5A
- 13 Size: 1570 x500 x450mm(H*W*D).
- 14 Others: abnormal alarm and power failure will not lose data;
Touch screen display and command input;



Abnormal reset and power off after the call, the instrument automatically discharge the residual reactants inside the instrument, automatically return to work

TPG-3030 Industrial Total Phosphorus Analyzer

The sample to be tested does not require any pretreatment. The water sample riser is directly inserted into the system water sample, and the total phosphorus concentration can be measured. The maximum measurement range of this equipment is 0.1~500mg/L TP. This method is mainly used for on-line automatic monitoring of total phosphorus concentration of waste (sewage) water discharge point source, surface water, etc.

Technical Indexes

- 1.Methods: National Standard GB11893-89 "Water quality - Determination of total phosphorus Ammonium molybdate spectrophotometric method".
2. Measuring range: 0-500mg/L TP (0-2mg/L; 0.1-10mg/L; 0.5-50mg/L; 1-100mg/L; 5-500mg/L)
3. Accuracy: no more than $\pm 10\%$ or no more than $\pm 0.2\text{mg/L}$
4. Repeatability: no more than $\pm 5\%$ or no more than $\pm 0.2 \text{ mg/L}$
5. Measurement period: minimum measuring period of 30 min, according to actual water samples, can be modified at 5 ~ 120min arbitrary digestion time.
6. Sampling period: the time interval (10 ~ 9999min adjustable) and the whole point of measurement mode.
7. Calibration period: 1~99 days, any interval, any time adjustable.
8. Maintenance period: once a month, each about 30 min.
9. Reagent for value-based management: Less than 3 yuan/samples.
10. Output: RS-232;RS485;4~20mA three ways
11. Environmental requirement: temperature adjustable interior, it is recommended temperature 5~28°C; humidity $\leq 90\%$ (no condensing)
12. Power supply: AC230 $\pm 10\%$ V, 50 $\pm 10\%$ Hz, 5A
13. Size: 1570 x500 x450mm(H*W*D).
14. Others: abnormal alarm and power failure will not lose data;

Touch screen display and command input;

Abnormal reset and power off after the call, the instrument automatically discharge the residual reactants inside the instrument, automatically return to work



CL-2059-01 Industrial Residual Chlorine Sensor



CL-2059-01 is an electrode for measuring the constant voltage principle water chlorine, chlorine dioxide, ozone. Constant voltage measurement maintains a stable electric potential at the measurement side of the electrode, different components produce different current intensity at the electric potential when measured. The micro-current measurement system consists of two platinum electrodes and a reference electrode consisting. Chlorine, chlorine dioxide, ozone will be consumed when water sample flowing through the measuring electrode, therefore, must maintain the water sample continue flow the measuring electrode.

Technical Indexes

Electrodes: glass bulb, Platinum (inside)

Reference electrode: gel with annular contacts

Body Material: Glass

Cable length: 5 m silver-plated three-core cable

Working pressure: 10bar at 20 °C

Dimensions: length 110mm, 12mm diameter

BH-485-CL Digital Residual Chlorine Sensor

The digital residual chlorine sensor is a new generation of intelligent water quality detection digital sensor independently developed by BOQU Instrument. Adopt advanced non-membrane constant voltage residual chlorine sensor, no need to change diaphragm and medicine, stable performance, simple maintenance. It has the characteristics of high sensitivity, fast response, accurate measurement, high stability, superior repeatability, easy maintenance, and multi-function. It can accurately measure the residual chlorine value in solution. It is widely used in self-controlled dosing of circulating water, chlorine control in swimming pools, and continuous monitoring and control of residual chlorine content in aqueous solutions in drinking water treatment plants, drinking water distribution networks, swimming pools, hospital waste water, and water quality treatment projects.

Technical Features

1. Isolation design of Power and output to ensure electrical safety.
2. Built-in protection circuit of power supply & communication chip
3. Comprehensive protection circuit design
4. Work reliably without additional isolation equipment.
4. Built-in circuit, it has good environmental resistance and easier installation and operation.
- 5, RS485 MODBUS-RTU , two-way communication, can receive remote instructions.
6. The communication protocol is simple and practical, and it is extremely convenient to use.
- 7, Output more electrode diagnostic information, more intelligent.
8. Integrated memory, store the stored calibration and setting information after power off..



Technical Parameters

- 1) Chlorine Measurement range: 0.00 ~ 20.00mg / L
- 2) Resolution: 0.01mg / L
- 3) Accuracy: 1% F.S.
- 4) Temperature compensation: -10.0 ~ 110.0 °C
- 5) SS316 housing, platinum sensor, three-electrode method
- 6) PG13.5 thread, easy to install on site
- 7) 2 power lines, 2 RS-485 signal lines
- 8) 12VDC power supply, power supply fluctuation range $\pm 10\%$, 2000V isolation

PH8012 Industrial Composite Sewage PH Sensor

Basic Principle of pH Electrode

In PH measurement, the used electrode is also known as the primary battery. The primary battery is a system, whose role is to transfer chemical energy into electrical energy. The voltage of the battery is called the electromotive force (EMF). This electromotive force (EMF) is composed of two half-batteries. One half-battery is called the measuring electrode, and its potential is related to the specific ion activity; the other half-battery is the reference battery, often called the reference electrode, which is generally interlinked with the measurement solution, and connected to the measuring instrument.

Model No.: PH8012

Measuring range: 0-14pH

Temperature range: 0-60°C

Compressive strength: 0.6MPa

Slope: $\geq 96\%$

Zero point potential: $E_0 = 7\text{PH} \pm 0.3$

Internal impedance: 150-250 MΩ (25°C)

Profile: 3-in-1 Electrode (Integrating the temperature compensation and the solution grounding)

Installation size: Upper and Lower 3/4NPT Pipe Thread

Connection: Low-noise cable goes out directly.

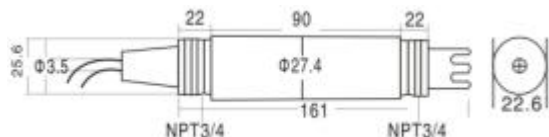
Application: Applicable to various industrial sewages, environmental protection and water treatment.



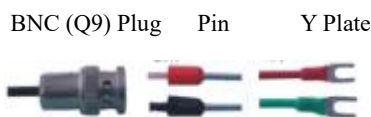
Features of PH Electrode

- It adopts the world-class solid dielectric and a large area of PTFE liquid for junction, non-block and easy maintenance.
- Long-distance reference diffusion channel greatly extends the service life of electrodes in the harsh environment
- It adopts PPS/PC casing and the upper and lower 3/4NPT pipe thread, so it is easy for installation and there is no need of the jacket, thus saving the installation cost.
- The electrode adopts the high-quality low-noise cable, which makes the signal output length more than 20 meters free of interference.
- There is no need for additional dielectric and there is a little amount of maintenance.
- High measurement accuracy, fast responding and good repeatability.
- Reference electrode with silver ions Ag/AgCL
- Proper operation shall make service life longer.
- It can be installed in the reaction tank or pipe laterally or vertically.
- The electrode can be replaced by a similar electrode made by any other country.

Electrode Structure Chart



Electrode Wiring Plug



PH8022 Industrial Pure Water PH Sensor

Basic Principle of pH Electrode

1. The polymer filling makes the reference junction potential very stable.
2. The diffusion potential is very stable; large-area diaphragm surrounds the glass diaphragm bubbles, so that the distance from the reference diaphragm to the glass diaphragm is near and constant; the ions diffused from diaphragm and the glass electrode quickly form a complete measurement circuit to respond quickly, so that the diffusion potential is not easy to be affected by the outside flow rate and is thus very stable!
3. As the diaphragm adopts the polymer filling and there is small and stable amount of overflowing electrolyte, it shall not pollute the measured pure water.
Therefore, the above-mentioned features of the composite electrode make it ideal for measuring PH value of high-purity water!

Model No.: PH8022

Measuring range: 0-14pH

Temperature range: 0-60°C

Compressive strength: 0.6MPa

Slope: $\geq 96\%$

Zero point potential: $E_0 = 7\text{PH} \pm 0.3$

Internal impedance: $\leq 250 \text{ M}\Omega$ (25°C)

Profile: 3-in-1 Electrode (Integrating the temperature compensation and the solution grounding)

Installation size: Upper and Lower 3/4NPT Pipe Thread

Connection: Low-noise cable goes out directly.

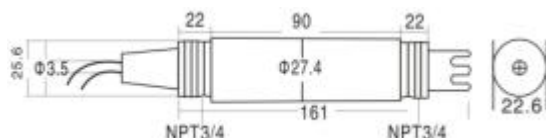
Application: Measurement of all kinds of pure water and high-purity water.



Features of PH Electrode

- It adopts the world-class solid dielectric and a large area of PCE liquid for junction, difficult to block and Convenient maintenance.
- Long-distance reference diffusion channel greatly extends the service life of electrodes in the harsh environment.
- It adopts PPS/PC casing and the upper and lower 3/4NPT pipe thread, so it is easy for installation and there is no need of the jacket, thus saving the installation cost.
- The electrode adopts the high-quality low-noise cable, which makes the signal output length more than 40 meters free of interference.
- There is no need for additional dielectric and there is a little amount of maintenance.
- High measurement accuracy, fast echoing and good repeatability.
- Reference electrode with silver ions Ag/AgCL
- Proper operation shall make service life longer.
- It can be installed in the reaction tank or pipe laterally or vertically.
- The electrode can be replaced by a similar electrode made by any other country.

Electrode Structure Chart



Electrode Wiring Plug

BNC (Q9) Plug Pin Y Plate



Application filed: Medicine, chlor-alkali chemicals, dyes pigments, pulp and paper, intermediates, fertilizers, starch, water and environmental protection industries, high purity water measurement.

PH8083 Industrial ORP Sensor



Features

- 1.It adopts the world-class solid dielectric and a large area of PTFE liquid for junction, difficult to block and easy to maintain.
- 2.Long-distance reference diffusion channel greatly extends the service life of electrodes in the harsh environment.
- 3.There is no need for additional dielectric and there is a little amount of maintenance.
4. High accuracy, fast response and good repeatability

Model No.: PH8083

Measuring range: 0-2000mV

Temperature range: 0-60°C

Compressive strength: 0.6MPa

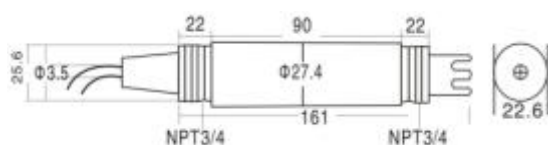
Material: PPS/PC

Installation Size: Upper and Lower 3/4NPT Pipe Thread

Connection: Low-noise cable goes out directly.

It is used for the oxidation reduction potential detection in medicine, chlor-alkali chemical, dyes, pulp & paper-making, intermediates, chemical fertilizer, starch, environment protection and electroplating industries.

Electrode Structure Chart



Electrode Wiring Plug

BNC (Q9) Plug Pin Y Plate



GPE100 Industrial PH Sensor



Technical Indexes

Measuring range: 0-14pH	Temperature range: 0-60°C
Compressive strength: 0.6MP	Socket: S8 and PG13.5 thread
Dimensions: Diameter 12 x 120	Material: Glass

Features

- It adopts gel or solid electrolyte, resisting pressure and helping reduce resistance; low resistance sensitive membrane.
 - Waterproof connector can be used for pure water testing.
 - There is no need for additional dielectric and there is a little amount of maintenance.
 - It adopts BNC connector, which can be replaced by any electrode from abroad.
- It can be used in conjunction with 361 L stainless steel sheath or PPS sheath.

Field of application

Water treatment, pure water industry, power plants, etc.

CPH600 Industrial PH Sensor



Technical Indexes

1. Measuring range: 0-14pH
2. Temperature range: 0-60℃
3. Compressive strength: 0.6MPa
4. Connection: S7 and PG13.5
5. Dimensions: Diameter 12×120mm ,150mm, 210mm

Features

1. It adopts gel dielectric and solid dielectric double liquid junction structure, which can be directly used in the chemical process of the high-viscosity suspension, emulsion, the liquid containing protein and other liquids, which are easy to choke.
2. There is no need for additional dielectric and there is a little amount of maintenance. With water resistant connector, can be used for pure water monitoring.
3. It adopts S7 and PG13.5 connector, which can be replaced by any electrode overseas.
4. For the electrode length, there are 120,150 and 210 mm available.
5. It can be used in conjunction with 316 L stainless steel sheath or PPS sheath.

Application field

Chemical medicine on-line monitoring, chrome-removing line, dyes, pigments, mining, pulp mills, starch, mud, sugar, high viscosity suspensions, emulsions, the solution containing proteins, etc.

PH5806 High Temperature PH Sensor

Technical Indexes

Measuring range: 0-14PH

Temperature range: 0-130 °C

Compressive strength: 0~6Bar

Sterilization temperature: ≤ 130 °C

Temperature compensation: PT1000

Socket: PG13.5

Dimensions: Diameter 12×120, 150, 210, 260 and 320mm



Features

1. It adopts heat-resisting gel dielectric and solid dielectric double liquid junction structure; in the circumstances when the electrode is not connected to the back pressure, the withstand pressure is 0~6Bar. It can be directly used for 130°C sterilization.
2. There is no need for additional dielectric and there is a little amount of maintenance.
3. It adopts S8 and PG13.5 thread socket, which can be replaced by any overseas electrode.
4. For the electrode length, there are 120, 150, 210, 260 and 320 mm available; according to different needs, they are optional.
5. It is used in conjunction with 316L stainless sheath.

Field of application

Bio-engineering: Amino acids, blood products, gene, insulin and interferon.

Pharmaceutical industry: Antibiotics, vitamins and citric acid

Beer: Brewing, mashing, boiling, fermentation, bottling, cold wort and deoxy water

Food and beverages: On-line measurement for MSG, soy sauce, dairy products, juice, yeast, sugar, drinking water and other bio-chemical process.

PH5806-K8S High-temperature PH Sensor

Technical Indexes

Measuring range: 0-14PH

Temperature range: 0-130 °C

Compressive strength: 0.4MPa

Sterilization temperature: ≤ 130 °C

Socket: K8S

Dimensions: Diameter 12×120, 150, 210, 260 and 320mm



Features

1. It adopts heat-resisting gel dielectric and solid dielectric double liquid junction structure; in the circumstances when the electrode is not connected to the back pressure, the withstand pressure is 0.4MPa. It can be directly used for 130°C sterilization.
2. There is no need for additional dielectric and there is a little amount of maintenance.
3. It adopts K8S and PG13.5 thread socket, which can be replaced by any overseas electrode.
4. For the electrode length, there are 120, 150, 210, 260 and 320 mm available; according to different needs, they are optional.
5. It is used in conjunction with 316L stainless sheath.

Field of application

Bio-engineering: Amino acids, blood products, gene, insulin and interferon.

Pharmaceutical industry: Antibiotics, vitamins and citric acid

Beer: Brewing, mashing, boiling, fermentation, bottling, cold wort and deoxy water

Food and beverages: On-line measurement for MSG, soy sauce, dairy products, juice, yeast, sugar, drinking water and other bio-chemical process.

PH5806-S8 High-temperature PH Sensor

Technical Indexes

Measuring range: 0-14PH

Temperature range: 0-130 °C

Compressive strength: 0.4MPa

Sterilization temperature: ≤ 130 °C

Socket: S8

Dimensions: Diameter 12×120, 150, 210, 260 and 320mm



Features

1. It adopts heat-resisting gel dielectric and solid dielectric double liquid junction structure; in the circumstances when the electrode is not connected to the back pressure, the withstand pressure is 0.4MPa. It can be directly used for 130°C sterilization.
2. There is no need for additional dielectric and there is a little amount of maintenance.
3. It adopts K8S and PG13.5 thread socket, which can be replaced by any overseas electrode.
4. For the electrode length, there are 120, 150, 210, 260 and 320 mm available; according to different needs, they are optional.
5. It is used in conjunction with 316L stainless sheath.

Field of application

Bio-engineering: Amino acids, blood products, gene, insulin and interferon.

Pharmaceutical industry: Antibiotics, vitamins and citric acid

Beer: Brewing, mashing, boiling, fermentation, bottling, cold wort and deoxy water

Food and beverages: On-line measurement for MSG, soy sauce, dairy products, juice, yeast, sugar, drinking water and other bio-chemical process.

PH5806-VP High-temperature PH Sensor

Technical Indexes

Measuring range: 0-14PH

Temperature range: 0-130 °C

Compressive strength: 0.4MPa

Sterilization temperature: ≤ 130 °C

Socket: VP

Dimensions: 12×120 mm

Temperature compensation: PT1000



Features

1. It adopts heat-resisting gel dielectric and solid dielectric double liquid junction structure; in the circumstances when the electrode is not connected to the back pressure, the withstand pressure is 0.4MPa. It can be directly used for 130°C sterilization.
2. There is no need for additional dielectric and there is a little amount of maintenance.
3. It adopts VP socket, which can be replaced by any overseas electrode.
4. For the electrode length, there are 120, 150, 210, 260 and 320 mm available; according to different needs, they are optional.
5. It is used in conjunction with 316L stainless sheath.

Field of application

Bio-engineering: Amino acids, blood products, gene, insulin and interferon.

Pharmaceutical industry: Antibiotics, vitamins and citric acid

Beer: Brewing, mashing, boiling, fermentation, bottling, cold wort and deoxy water

Food and beverages: On-line measurement for MSG, soy sauce, dairy products, juice, yeast, sugar, drinking water and other bio-chemical process.

CPH-809X Industrial Desulfurization PH Sensor



Desulfurization of pH measurement of pH electrode is used for flue gas desulfurization, the electrode adopts the gel electrode, free maintenance, electrode under high temperature or high pH can still maintain high precision.

The basic principle of PH electrode

For measurement of the PH electrode is also known as Primary battery. Primary battery is a system; its role is to make the chemical energy into electricity. The battery voltage is called the electromotive force (EMF). The electromotive force (EMF) consists of two half cell. One and a half cell called measuring battery, its potential is associated with specific ion activity; another one and a half in reference battery, often referred to as the reference electrode, it is general and measuring solution are interlinked, and connected to the measuring instrument. PH electrode made by plane glass ball bubble, high pollution resistance and resistant to impact.

Technical indexes

1. Measuring range :0~14 PH
2. Temperature range :0~95°C
3. Withstand voltage :0.6 Mpa
4. Material :PPS
5. Slope :<96%
6. Zero potential :7PH ± 0.3
7. Installation dimension : The upper and lower 3/4NPT pipe thread
8. Standard length :5m
9. Can be equipped with thermistor :2.252K、PT100 etc
10. Connection mode : Low noise cable leads directly
11. Application : Used in all kinds of industrial waste water treatment, environmental protection water treatment and pH measurement of flue gas desulfurization

BH-485-pH Industrial Digital pH Sensor

■ Summary

BH-485 Series of online pH electrode, adopt electrode measuring method, and realizes the automatic temperature compensation in the interior of the electrodes, Automatic identification of standard solution. Electrode adopt imported composite electrode, high precision, good stability, long lifetime, with rapid response, low maintenance cost, real-time online measurement characters etc.. The electrode using standard Modbus RTU (485) communication protocol, 24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Characters

- The characteristics of industrial sewage electrode, can work stably for a long time
- Built in temperature sensor, real-time temperature compensation
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V DC power supply.

■ Technical specifications

Model	BH-485-pH
Parameter measurement	pH、 Temperature
Measure range	pH: 0.0~14.0 Temperature: (0~50.0) °C
Accuracy	pH: ± 0.1 pH Temperature: ± 0.5 °C
Resolution	pH: 0.01pH Temperature: 0.1 °C
Power supply	24V DC
Power dissipation	1W
communication mode	RS485(Modbus RTU)
Cable length	Can be ODM depend on user's requirements
Installation	Sinking type, pipeline, circulation type etc.
Overall size	230mm \times \varnothing 30mm
Housing material	ABS



BH-485-PH8012 Digital pH Sensor

■ Summary

BH-485 Series of online pH electrode, adopt electrode measuring method, and realizes the automatic temperature compensation in the interior of the electrodes, Automatic identification of standard solution. Electrode adopt imported composite electrode, high precision, good stability, long lifetime, with rapid response, low maintenance cost, real-time online measurement characters etc.. The electrode using standard Modbus RTU (485) communication protocol, 12~24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Characters

- The characteristics of industrial sewage electrode, can work stably for a long time
- Built in temperature sensor, real-time temperature compensation
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V DC power supply.

■ Technical specifications

Model	BH-485-PH8012
Parameter measurement	pH、Temperature
Measure range	pH: 0.0~14.0 Temperature: (0~50.0) °C
Accuracy	pH: ±0.1pH Temperature: ±0.5°C
Resolution	pH: 0.01pH Temperature: 0.1°C
Power supply	12~24V DC
Power dissipation	1W
communication mode	RS485(Modbus RTU)
Cable length	Can be ODM depend on user's requirements
Installation	Sinking type, pipeline, circulation type etc.
Overall size	230mm× \varnothing 30mm
Housing material	ABS



BH-485-ORP Digital ORP Sensor



■ Summary

BH-485 Series of online ORP electrode, adopt electrode measuring method, and realizes the automatic temperature compensation in the interior of the electrodes, Automatic identification of standard solution. Electrode adopt imported composite electrode, high precision, good stability, long lifetime, with rapid response, low maintenance cost, real-time online measurement characters etc.. The electrode using standard Modbus RTU (485) communication protocol, 24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Technical specifications

Model	BH-485-ORP
Parameter measurement	ORP, Temperature
Measure range	mV: -1999~+1999 Temperature: (0~50.0)°C
Accuracy	mV: ± 1 mV Temperature: ± 0.5 °C
Resolution	mV: 1 mV Temperature: 0.1°
Power supply	24V DC
Power dissipation	1W
Communication mode	RS485(Modbus RTU)
Cable length	5 meters, can be ODM depend on user's requirements
Installation	Sinking type, pipeline, circulation type etc.
Overall size	230mm \times \varnothing 30mm
Housing material	ABS

PF-2085 Industrial Fluorine&Chlorine Ion Sensor

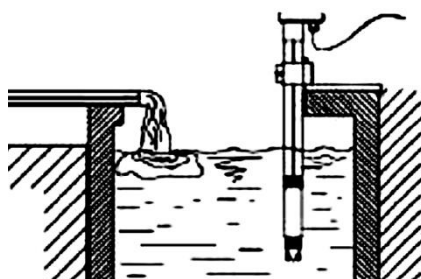
PF-2085 online fluoride/chloride composite electrode with fluoride single crystal film, PTFE annular liquid interface and solid electrolyte is compounded with pressure, anti pollution and other characteristics. Widely used in semiconductor materials, solar energy materials, metallurgical industry, fluorine containing electroplating etc industry waste water treatment process control, field of emission monitoring.

Features

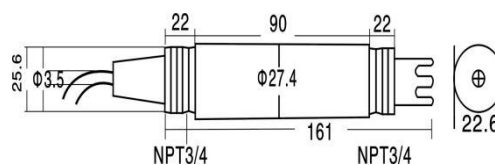
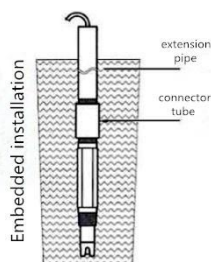
Online fluorine/chlorine ion electrode is measured in aqueous solution fluorine/chlorine ion concentration or boundary determination and indicator electrode fluorine/chlorine ions to form stable complexes of ion concentration.

Technical Indexes

Measuring principle	Ion selective potentiometry
Measuring range	0.2ug/L~2300mg/L
Automatic temperature compensation range	0~99.9°C , with 25°C as the reference temperature
Temperature range	0~99.9°C
Automatic temperature compensation	2.252K、10K、PT100、PT1000etc
Water sample tested	0~99.9°C, 0.6MPa
Interference ions	AL ³⁺ 、Fe ³⁺ 、OH ⁻ etc
pH value range	5.00~10.00PH
Blank potential	> 200mV(deionized water)
Electrode length	195mm
Basic material	PPS
Electrode thread	3/4 pipe thread (NPT)
Cable length	5 meters



Installation of the measuring cell



Electrode structure

DDG-0.01 Industrial Conductivity Electrode



The conductivity industrial series of electrodes are specially used for the measurement of conductivity value of pure water, ultra-pure water, water treatment, etc. It is especially suitable for conductivity measurement in the thermal power plant and the water treatment industry. It is featured by the double-cylinder structure and the titanium alloy material, which can be naturally oxidized to form the chemical passivation. Its anti-infiltration conductive surface is resistant to all kinds of liquid except fluoride acid. The temperature compensation components are: NTC2.252K, 2K, 10K, 20K, 30K, pt100, pt1000, etc.

Technical Indexes

1. Constant of electrode: 0.01
2. Compressive strength: 0.6MPa
3. Measuring range: 0.01-20uS/cm
4. Connection: hard tube, hose tube, flange installation
5. Material: 316L stainless steel or Titanium Alloy
6. Application: power plant, water treatment industry

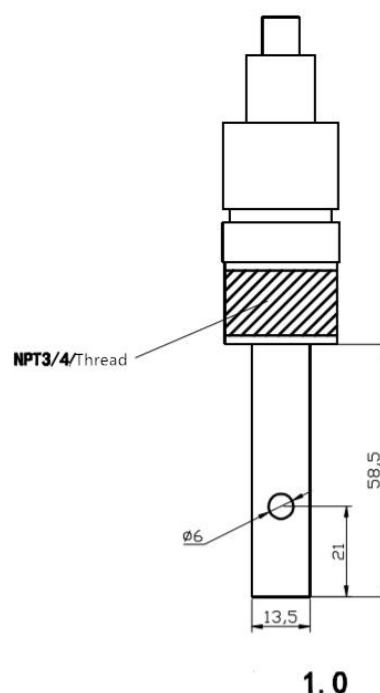
DDG-0.1 Industrial Conductivity Sensor



The conductivity industrial series of electrodes are specially used for the measurement of conductivity value of pure water, ultra-pure water, water treatment, etc. It is especially suitable for conductivity measurement in the thermal power plant and the water treatment industry. It is featured by the double-cylinder structure and the titanium alloy material, which can be naturally oxidized to form the chemical passivation. Its anti-infiltration conductive surface is resistant to all kinds of liquid except fluoride acid. The temperature compensation components are: NTC2.252K, 2K, 10K, 20K, 30K, pt100, pt1000, etc. which are specified by the user. K=10.0 or K=30 electrode adopts a large area of platinum structure, which is resistant to strong acid and alkaline and has strong anti-pollution capacity; it is mainly used for on-line measurement of the conductivity value in the special industries, such as the sewage treatment industry and the seawater purification industry.

Technical Indexes

1. Constant of electrode: 0.1
2. Compressive strength: 0.6MPa
3. Measuring range: 0-200uS/cm
4. Connection: 1/2or 3/4 Thread Installation
5. Material: 316L Titanium Alloy and Platinum
6. Application: Water Treatment Industry



DDG-0.1F&0.01F Industrial Conductivity Sensor



The conductivity industrial series of electrodes are specially used for the measurement of conductivity value of pure water, ultra-pure water, water treatment, etc. It is especially suitable for conductivity measurement in the thermal power plant and the water treatment industry. It is featured by the double-cylinder structure and the titanium alloy material, which can be naturally oxidized to form the chemical passivation. Its anti-infiltration conductive surface is resistant to all kinds of liquid except fluoride acid. The temperature compensation components are: NTC2.252K, 2K, 10K, 20K, 30K, pt100, pt1000, etc.

Technical Indexes

1. Constant of electrode: 0.1, 0.01
2. Compressive strength: 0.6MPa
3. Measuring range: 0.01-20uS/cm, 0.1~200us/cm
4. Connection: hard tube, hose tube, flange installation
5. Material: 316L stainless steel, Titanium Alloy and Platinum
6. Application: power plant, water treatment industry

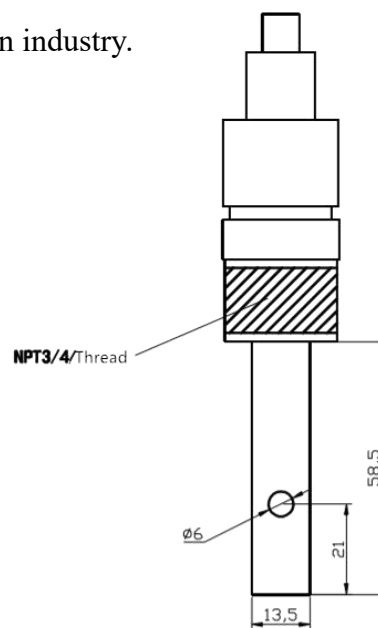
DDG-1.0 Industrial Conductivity Sensor



The conductivity industrial series of electrodes are specially used for the measurement of conductivity value of pure water, ultra-pure water, water treatment, etc. It is especially suitable for conductivity measurement in the thermal power plant and the water treatment industry. It is featured by the double-cylinder structure and the titanium alloy material, which can be naturally oxidized to form the chemical passivation. Its anti-infiltration conductive surface is resistant to all kinds of liquid except fluoride acid. The temperature compensation components are: NTC2.252K, 2K, 10K, 20K, 30K, pt100, pt1000, etc. which are specified by the user. K=10.0 or K=30 electrode adopts a large area of platinum structure, which is resistant to strong acid and alkaline and has strong anti-pollution capacity; it is mainly used for on-line measurement of the conductivity value in the special industries, such as the sewage treatment industry and the seawater purification industry.

Technical Indexes

1. Constant of electrode: 1.0
2. Compressive strength: 0.6MPa
3. Measuring range: 0-2000uS/cm
4. Connection: 1/2or 3/4 Thread Installation
5. Material: 316L Titanium Alloy and Platinum
6. Application: Water Treatment Industry



1.0

DDG-10.0 Industrial Conductivity Sensor



The conductivity industrial series of electrodes are specially used for the measurement of conductivity value of pure water, ultra-pure water, water treatment, etc. It is especially suitable for conductivity measurement in the thermal power plant and the water treatment industry. It is featured by the double-cylinder structure and the titanium alloy material, which can be naturally oxidized to form the chemical passivation. Its anti-infiltration conductive surface is resistant to all kinds of liquid except fluoride acid. The temperature compensation components are: NTC2.252K, 2K, 10K, 20K, 30K, pt100, pt1000, etc. which are specified by the user. K=10.0 or K=30 electrode adopts a large area of platinum structure, which is resistant to strong acid and alkaline and has strong anti-pollution capacity; it is mainly used for on-line measurement of the conductivity value in the special industries, such as the sewage treatment industry and the seawater purification industry.

Technical Indexes

1. Constant of electrode: 10.0
2. Compressive strength: 0.6MPa
3. Measuring range: 0-20mS/cm
4. Connection: 1/2or 3/4 Thread Installation
5. Material: polysulfone
6. Application: Water Treatment Industry

DDG-30.0 Industrial Conductivity Sensor



The conductivity industrial series of electrodes are specially used for the measurement of conductivity value of pure water, ultra-pure water, water treatment, etc. It is especially suitable for conductivity measurement in the thermal power plant and the water treatment industry. It is featured by the double-cylinder structure and the titanium alloy material, which can be naturally oxidized to form the chemical passivation. Its anti-infiltration conductive surface is resistant to all kinds of liquid except fluoride acid. The temperature compensation components are: NTC2.252K, 2K, 10K, 20K, 30K, pt100, pt1000, etc. which are specified by the user. K=10.0 or K=30 electrode adopts a large area of platinum structure, which is resistant to strong acid and alkaline and has strong anti-pollution capacity; it is mainly used for on-line measurement of the conductivity value in the special industries, such as the sewage treatment industry and the seawater purification industry.

Technical Indexes

1. Constant of electrode: 30.0
2. Compressive strength: 0.6MPa
3. Measuring range: 0-200mS/cm
4. Connection: 1/2or 3/4 Thread Installation
5. Material: polysulfone
6. Application: Water Treatment Industry

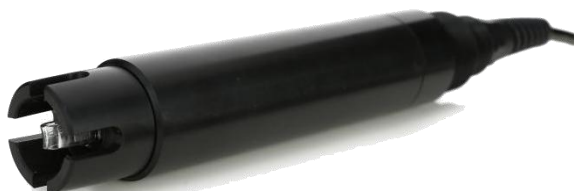
BH-485-DD Digital Conductivity Sensor

■ Summary

BH-485 series of online conductivity electrode, in the interior of the electrodes achieve the automatic temperature compensation, digital signal conversion and other functions. With rapid response, low maintenance cost, real-time online measurement characters etc. The electrode using standard Modbus RTU (485) communication protocol, 24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Features

- Can work stably for a long time
- Built in temperature sensor, real-time temperature compensation
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V DC power supply.



■ Technical Indexes

Model	BH-485-DD
Parameter measurement	conductivity, temperature
Measure range	Conductivity: 0-2000us/cm Temperature: (0~50.0)°C
Accuracy	Conductivity: ±20 us/cm Temperature: ±0.5°C
Reaction time	<60S
Resolution	Conductivity: 1us/cm Temperature: 0.1°C
Power supply	24V DC
Power dissipation	1W
Communication mode	RS485(Modbus RTU)
Cable length	5 meters, can be ODM depend on user's requirements
Installation	Sinking type, pipeline, circulation type etc.
Overall size	230mm× \varnothing 30mm
Housing material	ABS

BH-485-DD-0.01 Digital Conductivity Sensor

■ Summary

BH-485 series of online conductivity electrode, in the interior of the electrodes achieve the automatic temperature compensation, digital signal conversion and other functions. With rapid response, low maintenance cost, real-time online measurement characters etc. The electrode using standard Modbus RTU (485) communication protocol, 24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Features

- Can work stably for a long time
- Built in temperature sensor, real-time temperature compensation
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V DC power supply.

■ Technical Indexes

Model	BH-485-DD-0.01	
Parameter measurement	conductivity, temperature	
Measure range	Conductivity: 0-20us/cm	Temperature: (0~50.0)°C
Accuracy	Conductivity: ±0.2 us/cm	Temperature: ±0.5°C
Reaction time	<60S	
Resolution	Conductivity: 0.01us/cm	Temperature: 0.1°C
Power supply	12~24V DC	
Power dissipation	1W	
Communication mode	RS485(Modbus RTU)	
Cable length	5 meters, can be ODM depend on user's requirements	
Installation	Sinking type, pipeline, circulation type etc.	
Overall size	230mm× \varnothing 30mm	
Housing material	Stainless Steel	



BH-485-DD-0.1 Digital Conductivity Sensor

■ Summary

BH-485 series of online conductivity electrode, in the interior of the electrodes achieve the automatic temperature compensation, digital signal conversion and other functions. With rapid response, low maintenance cost, real-time online measurement characters etc. The electrode using standard Modbus RTU (485) communication protocol, 24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Features

- Can work stably for a long time
- Built in temperature sensor, real-time temperature compensation
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V DC power supply.

■ Technical Indexes

Model	BH-485-DD-0.1	
Parameter measurement	conductivity, temperature	
Measure range	Conductivity: 0-200us/cm	Temperature: (0~50.0)°C
Accuracy	Conductivity: ±0.2 us/cm	Temperature: ±0.5°C
Reaction time	<60S	
Resolution	Conductivity: 0.1us/cm	Temperature: 0.1°C
Power supply	12~24V DC	
Power dissipation	1W	
Communication mode	RS485(Modbus RTU)	
Cable length	5 meters, can be ODM depend on user's requirements	
Installation	Sinking type, pipeline, circulation type etc.	
Overall size	230mm× \varnothing 30mm	
Housing material	Stainless Steel	



BH-485-DD-1.0 Digital Conductivity Sensor

■ Summary

BH-485 series of online conductivity electrode, in the interior of the electrodes achieve the automatic temperature compensation, digital signal conversion and other functions. With rapid response, low maintenance cost, real-time online measurement characters etc. The electrode using standard Modbus RTU (485) communication protocol, 24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Features

- Can work stably for a long time
- Built in temperature sensor, real-time temperature compensation
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V DC power supply.

■ Technical Indexes

Model	BH-485-DD-1.0
Parameter measurement	conductivity, temperature
Measure range	Conductivity: 0-2000us/cm Temperature: (0~50.0)°C
Accuracy	Conductivity: ±2 us/cm Temperature: ±0.5°C
Reaction time	<60S
Resolution	Conductivity: 1us/cm Temperature: 0.1°C
Power supply	12~24V DC
Power dissipation	1W
Communication mode	RS485(Modbus RTU)
Cable length	5 meters, can be ODM depend on user's requirements
Installation	Sinking type, pipeline, circulation type etc.
Overall size	230mm× \varnothing 30mm
Housing material	Stainless Steel



BH-485-DD-10.0 Digital Conductivity Sensor

■ Summary

BH-485 series of online conductivity electrode, in the interior of the electrodes achieve the automatic temperature compensation, digital signal conversion and other functions. With rapid response, low maintenance cost, real-time online measurement characters etc. The electrode using standard Modbus RTU (485) communication protocol, 24V DC power supply, four wire mode can very convenient access to sensor networks.

■ Features

- Can work stably for a long time
- Built in temperature sensor, real-time temperature compensation
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V DC power supply.

■ Technical Indexes

Model	BH-485-DD-10.0
Parameter measurement	conductivity, temperature
Measure range	Conductivity: 0-20000us/cm Temperature: (0~50.0)°C
Accuracy	Conductivity: ±20 us/cm Temperature: ±0.5°C
Reaction time	<60S
Resolution	Conductivity: 10us/cm Temperature: 0.1°C
Power supply	12~24V DC
Power dissipation	1W
Communication mode	RS485(Modbus RTU)
Cable length	5 meters, can be ODM depend on user's requirements
Installation	Sinking type, pipeline, circulation type etc.
Overall size	230mm× \varnothing 30mm
Housing material	Polysulfone



BH-485-ECG Digital Graphite Conductivity Sensor

This product is the latest digital graphite conductivity electrode independently developed and produced by our company. It can be set and calibrated remotely, and the operation is simple. It can be widely used in monitoring the conductivity of thermal power, chemical fertilizer, metallurgy, environmental protection, pharmaceutical, biochemical, food, fermentation, brewing and tap water and other fields.

Features

- 1.Light weight for electrode, easy installation
- 2.High quality electrode bring high measurement accuracy and sensitive response
- 3.Built-in temperature probe, instant temperature compensation
- 4.Strong anti-interference ability, long lifespan.
- 5.Application: thermal power, chemical fertilizer, metallurgy, environmental protection, pharmaceutical.

Technical Indexes

Model No	BH-485-ECG
Cell constant	K=1
Measure Range	0-20000uS/cm
TDS	0-10000ppm
Salinity	0-72ppt
Temp Range	0-60℃
Accuracy	2%FS ±0.5℃
Pressure	0.3MPa
Resolution	1us/cm 1ppm 0.1℃
Material	Stainless Steel
Connection	Top G1 Thread
Power Supply	9~36V DC
Communication	ModbusRTU
Protection Grade	IP68
Cable Length	5 meters



DDG-GY Industrial Inductive Conductivity Sensor



Widely used in pipe cleaning of power plants and foodstuff, as well as chemical production highly polluted environment. Suitable acid concentration measurement and the conductivity measurement of a high concentration salt solution less than 10%.

Features

1. Performance in harsh chemical environments is excellent, chemical resistant material manufactured by the electrode is not polarized interference, to avoid dirt, grime and even affect fouling layer covering phenomena such as very poor, simple and easy to install so it's a very wide range of applications. Design electrodes applied to a high concentration of acids (such as fuming sulfuric acid) environment.
2. English acid concentration meter use, high accuracy, and high stability.
3. Conductivity sensor technology eliminates clogging and polarization errors. Used in all areas of contact electrodes may cause blockage which has a high performance.
4. Large aperture sensor, long-term stability.
5. Accommodate a wide range of brackets and use common bulkhead mounting structure, flexible installation.

Technical Indexes

1. Maximum pressure (bar): 1.6MP
2. Electrode body materials: PP
3. Measuring range: 0 ~ 10ms, 0 ~ 20ms, 0 ~ 200ms, 0 ~ 2000ms
4. Accuracy (cell constant):. \pm (+25 us to measure the value of 0.5%)
5. Installation: flow-through, pipeline, immersion
6. Pipe installations: pipe threads 1 ½ or ¾ NPT
7. Output signal: 4-20mA or RS485

DDG-GYW Industrial Inductive Conductivity Sensor

Widely used in pipe cleaning of power plants and foodstuff, as well as chemical production highly polluted environment. Suitable acid concentration measurement and the conductivity measurement of a high concentration salt solution less than 10%.

Features

1. Performance in harsh chemical environments is excellent, chemical resistant material manufactured by the electrode is not polarized interference, to avoid dirt, grime and even affect fouling layer covering phenomena such as very poor, simple and easy to install so it's a very wide range of applications. Design electrodes applied to a high concentration of acids (such as fuming sulfuric acid) environment.
2. English acid concentration meter use, high accuracy, and high stability.
3. Conductivity sensor technology eliminates clogging and polarization errors. Used in all areas of contact electrodes may cause blockage which has a high performance.
4. Large aperture sensor, long-term stability.
5. Accommodate a wide range of brackets and use common bulkhead mounting structure, flexible installation.

Technical Indexes

1. Maximum pressure (bar): 1.6MP
2. Electrode body materials: PP, ABS, PTFE optional
3. Measuring range: 0 ~ 10ms, 0 ~ 20ms, 0 ~ 200ms, 0 ~ 2000ms
4. Measuring temperture:0-130℃
5. Accuracy (cell constant):. \pm (+25 us to measure the value of 0.5%)
6. Installation: flow-through, pipeline, immersion
7. Pipe installations: pipe threads 1 ½ or ¾ NPT
8. Output: 4-20mA or RS485



ZDYG-2088-01QX Digital Turbidity Sensor



Measurement principle:

ZDYG-2088-01QX turbidity sensor light scattering method based on combination of infrared absorption, infrared light emitted by the light source after the scattering of turbidity in the sample. Finally, by the photodetector conversion value of electrical signals, and obtaining the turbidity of the sample after the analog and digital signal processing.

Typical applications :

1. The hole of tap-water plant hole, sedimentation basin etc. steps on-line monitoring and other aspects of the turbidity;
2. The sewage treatment plant, on-line monitoring of turbidity of different kinds of industrial production process of water and waste water treatment process.

Technical Parameters:

Measure range	0.01-100 NTU, 0.01—4000 NTU
Accuracy	Less than the measured value of $\pm 1\%$, or $\pm 0.1\text{NTU}$, choose the big one one
Pressure range	$\leq 0.4\text{Mpa}$
Current speed	$\leq 2.5\text{m/s}$ 、 8.2ft/s
Calibration	Sample calibration, slope calibration
Sensor main material	Body: SUS316L + PVC (normal type), SUS316L Titanium + PVC (sea water type); O type circle: Fluorine rubber; cable: PVC
Power supply	12V
Communication interface	MODBUS RS485
Temperature storage	-15 to 65°C
Working temperature	0 to 45°C
Size	60mm* 256mm
Weight	1.65kg
Protection grade	IP68/NEMA6P
Cable length	Standard 10m cable, can extended to 100m

ZDYG-2087-01QX Online Sludge Concentration Sensor



Measurement principle:

ZDYG-2087-01QX TSS sensor light scattering method based on combination of infrared absorption, infrared light emitted by the light source after the scattering of turbidity in the sample. Finally, by the photodetector conversion value of electrical signals, and obtaining the turbidity of the sample after the analog and digital signal processing.

Typical applications :

1. The hole of tap-water plant hole, sedimentation basin etc. steps on-line monitoring and other aspects of the turbidity;
2. The sewage treatment plant, on-line monitoring of turbidity of different kinds of industrial production process of water and waste water treatment process.

Technical Parameters:

Measure range	0.01-20000mg/L, 45000mg/L,120000mg/L
Accuracy	Less than the measured value of $\pm 1\%$, or $\pm 0.1\text{mg/L}$, choose the big one one
Pressure range	$\leq 0.4\text{Mpa}$
Current speed	$\leq 2.5\text{m/s}$, 8.2ft/s
Calibration	Sample calibration, slope calibration
Sensor main material	Body: SUS316L + PVC (normal type), SUS316L Titanium + PVC (sea water type); O type circle: Fluorine rubber; cable: PVC
Power supply	12V
Alarm relay	Set up 3 channels of alarm relay, Procedures for setting response parameters and response values.
Communication interface	MODBUS RS485
Temperature storage	-15 to 65°C
Working temperature	0 to 45°C
Size	$60\text{mm} \times 256\text{mm}$
Weight	1.65kg
Protection grade	IP68/NEMA6P
Cable length	Standard 10m cable, can extended to 100m

DOG-209F Industrial Dissolved Oxygen Sensor



Features

DOG-209F Dissolved Oxygen electrode has high stability and reliability, which can be used in the harsh environment; it demands for less maintenance; it is suitable for continuous measurement of the dissolved oxygen in the fields of urban sewage treatment, industrial waste water treatment, aquaculture, environmental monitoring etc.

Technical Indexes

Measuring range: 0-20mg/L

Measuring principle: Current sensor (Polarographic electrode)

Permeable membrane thickness: 50 um

Electrode shell material: U PVC or 31 6L stainless steel

Temperature compensation resistor: Ptl00, Ptl000, 22K, 2.252K etc.

Sensor life: >2 years

Cable length: 5m

Detection lower limit: 0.01 mg/L (20°C)

Measurement upper limit: 40mg/L

Response time: 3min (90%, 20°C)

Polarization time: 60min

Minimum flow rate: 2.5cm/s

Drift: <2%/month

Measurement error: <± 0.1mg/l

Output current: 50~80nA/0.1mg/L Note: Maximum Current 3.5uA

Polarization voltage: 0.7V

Zero oxygen: <0.1 mg / L (5min)

Calibration intervals: >60 days

Measured water temperature: 0-60°C

DOG-209FA Industrial Dissolved Oxygen Sensor



Features

DOG-209FA type oxygen electrode improved from the previously dissolved oxygen electrode, change diaphragm into a grit mesh metal membrane, with high stability and stress resistant, can be used in a more harsh environment, maintenance volume is smaller, suitable for urban sewage treatment, industrial wastewater treatment, aquaculture and environmental monitoring and other fields of continuous measurement of dissolved oxygen.

Technical Indexes

Ultra resistant to pressure (0.6Mpa) wallop, imported (grit mesh metal membrane)

Up thread: M32 * 2.0

Measuring range: 0-20mg / L

Measuring principle: Current type sensor (polarographic electrode)

Breathable membrane thickness: 100μm

Electrode shell material: PVC or 316L stainless steel

Temperature compensation resistance: Pt100, Pt1000, 22K, 2.252K, etc.

Sensor life:> 2 years

Cable length: 5m

Detection limit: 0.01 mg / L (20 °C)

Measurement limit: 40 mg / L

Response time: 2min (90%, 20 °C)

Polarization time: 60min

Minimum flow rate: 2.5cm / s

Drift: <2% / month

Measurement error: <± 0.01 mg / L

Output Current: 50-80nA/0.1 mg / L Note: Maximum current 3.5uA

Polarization voltage: 0.7V

Zero oxygen: <0.01 mg / L

Calibration interval:> 60 days

Measured water temperature :0-60 °C

DOG-208F Industrial Dissolved Oxygen Sensor

Features

DOG-208F Dissolved Oxygen Electrode applicable for Polarography Principle

With platinum (Pt) as cathode and Ag / AgCl as anode

The electrolyte is 0.1 M potassium chloride (KCl).

The silicone rubber permeable membrane imported from U.S. serves as the permeable membrane.

It has silicone rubber and steel gauze.

It is featured by collision resistance, corrosion resistance, high temperature resistance, shape retention and other performances

Technical Indexes

Measuring range: 0-100ug/L 0-20mg/L

Electrode material: 316L stainless steel

Temperature compensation resistor: 2.252K 22K Pt100 Pt1000 etc

Sensor life: >3 years

Cable length: 5m (double shielded)

Detection lower Limit: 0.1ug/L(ppb)(20°C)

Measurement upper limit: 20mg/l(ppm)

Response time: ≤3min(90%, 20°C)

Polarization time: >8h

Minimum flow rate: 5cm/s; 515 L/h

Drift: <3%/month

Measurement error: <±1 ppb

Air current: 50-80nA Note: Maximum current 20-25 uA

Polarization voltage: 0.7V

Zero Oxygen: <5ppb(60min)

Calibration intervals: >60 days

Measured water temperature: 0~60°C



Scope of application

Applied to thermal power plants, power plant desalted water, boiler feed water etc places of trace oxygen content.

DOG-208FA High Temperature Dissolved Oxygen Sensor

DOG-208FA electrode, which is specially designed to be resistant to 130 degrees steam sterilization, the pressure auto-balance high temperature dissolved oxygen electrode, for liquids or gases dissolved oxygen measurement, the electrode is most suitable for small microbial culture reactor dissolved oxygen levels on line. Can also be used for environmental monitoring, wastewater treatment and aquaculture on-line measurement dissolved oxygen levels.

Dissolved oxygen electrode characteristics

- 1.DOG-208FA high temperature fermentation dissolved oxygen electrode applicable for Polarographic Principle
- 2.With imported breathable membrane heads
- 3.Steel gauze electrode membrane and silicone rubber
- 4.Endure high temperature, No deformation characteristics

Technical indexes

- 1.Electrode body material: stainless steel
 - 2.Permeable membrane: fluorine plastic, silicone, stainless steel wire mesh composite membrane.
 - 3.Cathode: platinum wire
 - 4.Anode: silver
 - 5.Electrodes built-in temperature sensor: PT1000
 - 6.The response current in the air: About 60nA
 - 7.The response current in a nitrogen atmosphere: less than one percent response current of response in air.
 - 8.Electrode response time: about 60 seconds (up 95% response)
 - 9.Electrode Response Stability: a constant oxygen partial pressure at a constant temperature environment, response current drift less than 3% per week
- Liquid mixing flow to the electrode response: 3% or less (in water at room temperature)
- Electrode Response Temperature Coefficient: 3% (greenhouse)
- Insert the electrode diameter: 12 mm, 19 mm, 25 mm optional
- Electrode insertion length: 80,150,200,250,300 mm



BH-485-DO Digital Dissolved Oxygen Sensor

■Summary

BH-485 series online dissolved oxygen electrode, adopt original battery type oxygen sensing electrode, and internal electrode to achieve the automatic temperature compensation and digital signal conversion. With rapid response, low maintenance cost, real-time online measurement. The electrode adopt the standard Modbus RTU (485) protocol, 24V DC power supply, four wire mode, can be very convenient to access to sensor networks.

■Features

- The on-line oxygen sensing electrode, can work stably for a long time.
- Built in temperature sensor, real-time temperature compensation.
- RS485 signal output, strong anti-interference ability, output distance up to 500m.
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode
- 24V - DC power supply.

■ Technical specifications

Model	BH-485-DO
Parameter measurement	Dissolved oxygen,temperature
Measure range	Dissolved oxygen: (0~20.0) mg/L Temperature: (0~50.0) °C
Basic error	Dissolved oxygen: ±0.30mg/L Temperature: ±0.5°C
Response time	Less than 60S
Resolution	Dissolved oxygen: 0.01ppm Temperature: 0.1°C
Power supply	24VDC
Power dissipation	1W
communication mode	RS485(Modbus RTU)
Cable length	Can be ODM depend on user's requirements
Installation	Sinking type, pipeline, circulation type etc.
Overall size	230mm× \varnothing 30mm
Housing material	ABS



DOG-209FYD Optical Dissolved Oxygen Sensor

DOG-209FYD dissolved oxygen sensor uses fluorescence measurement of dissolved oxygen, blue light emitted by the phosphor layer, a fluorescent substance is excited to emit red light, and the fluorescent substance and the concentration of oxygen is inversely proportional to the time back to the ground state. The method uses a measurement of dissolved oxygen, no oxygen consumption measurement, the data is stable, reliable performance, there is no interference, installation and calibration simple. Widely used in sewage treatment plants each process, water plants, surface water, industrial process water production and wastewater treatment, aquaculture and other industries on-line monitoring of DO.

Features

1. The sensor uses a new type of oxygen-sensitive film with good reproducibility and stability.

Breakthrough fluorescence techniques, requires virtually no maintenance.

2. Maintain prompt the user can customize the prompt message is automatically triggered.

3. Hard, fully enclosed design, improved durability.

4. Use simple, reliable, and interface instructions can reduce operational errors.

5. Set a visual warning system to provide important alarm functions.

6. Sensor convenient on-site installation, plug and play.



Technical Indexes

Material	Body: SUS316L + PVC (Limited Edition), titanium (seawater version); O-ring: Viton; Cable: PVC
Measuring range	Dissolved oxygen: 0-20 mg/L、 0-20 ppm; Temperature: 0-45°C
Measurement accuracy	Dissolved oxygen: measured value $\pm 3\%$; Temperature: $\pm 0.5^\circ\text{C}$
Pressure range	$\leq 0.3\text{Mpa}$
Output	MODBUS RS485
Storage temperature	-15~65°C
Ambient temperature	0~45°C
Calibration	Air automatic calibration, sample calibration
Cable	10m
Size	55mmx342mm
Weight	about 1.85KG
Waterproof rating	IP68/NEMA6P

BH-485-CHL Digital Chlorophyll A Sensor

The digital chlorophyll sensor uses the characteristic that chlorophyll A has absorption peaks and emission peaks in the spectrum. It emits monochromatic light of a specific wavelength and irradiates water. The chlorophyll A in water absorbs the energy of the monochromatic light and releases a monochromatic light of another wavelength. Color light, the intensity of light emitted by chlorophyll A is proportional to the content of chlorophyll A in water.

It's widely used for online monitoring of chlorophyll A in water plant imports, drinking water sources, aquaculture, etc ; online monitoring of chlorophyll A in different water bodies such as surface water, landscape water, and seawater.

Technical Specification

Measuring range	0-500 ug/L chlorophyll A
Accuracy	±5%
Repeatability	±3%
Resolution	0.01 ug/L
Pressure range	≤0.4Mpa
Calibration	Deviation calibration, Slope calibration
Material	SS316L (Ordinary) Titanium Alloy (Seawater)
Power	12VDC
Protocol	MODBUS RS485
Storage Temp	-15~50℃
Operating Temp	0~45℃
Size	37mm*220mm(Diameter*length)
Protection class	IP68
cable length	Standard 10m, can be extended to 100m



Note:The chlorophyll distribution in the water is very uneven, and multi-point monitoring is recommended; water turbidity is less than 50NTU

BH-485-Algae Digital Blue-green Algae Sensor

The Blue-green algae sensor utilizes the characteristic that Blue-green algae A has an absorption peak and an emission peak in the spectrum. When the spectral absorption peak of Blue-green algae A is emitted, monochromatic light is irradiated into the water, and Blue-green algae A in the water absorbs the energy of the monochromatic light, and is released. Another monochromatic light with a wavelength emission peak, the light intensity emitted by Blue-green algae A is proportional to the content of Blue-green algae A in water. The sensor is easy to install and use. Blue-green algae universal applications monitoring in water stations, surface waters, etc.

Technical Indexes

Specification	Detailed information
Size	220mm Dim37mm*Length220mm
Weight	0.8KG
Main Material	Body: SUS316L + PVC (ordinary version), Titanium alloy (seawater)
Waterproof Level	IP68/NEMA6P
Measuring Range	100—300,000cells/mL
Measurement Accuracy	1ppb Rhodamine WT dye signal level corresponding to $\pm 5\%$
Pressure Range	$\leq 0.4\text{Mpa}$
Measure Temp.	0 to 45°C
Calibration	Deviation calibration, slope calibration
Cable length	Standard cable 10M, can be extended up to 100M
Conditional requirement	The distribution of Blue-green algae in water is very uneven. Recommended to monitor multiple points; the turbidity of water is lower than 50NTU.
Storage Temp.	-15 to 65°C



BH-485-COD Online UV COD Sensor

Based on the absorption of ultraviolet light by organic matter, spectroscopic organic material online sensor adopts the 254 nm spectral absorption coefficient SAC254 which is used to reflect the important measurement parameters of the soluble organic matter content in water, and it can be converted into COD value under certain conditions. This method allows for continuous monitoring without the need for any reagents.

It is widely used in the continuous monitoring of organic matter load in the sewage treatment process, on-line real-time monitoring of inlet and outlet water quality of sewage plant; continuous on-line monitoring of surface water, drainage of waste water from industrial and fishery fields. Technical parameters are shown in table 1.

Specification	Details
Measuring Range	0~2000mg/l COD (2mm Optical Path)
	0~1000mg/l COD (5mm Optical Path)
	0~90mg/l COD (50mm Optical Path)
Accuracy	± 5%
Repeatability	± 2%
Resolution	0.01 mg/L
Pressure range	≤0.4Mpa
Sensor material	Body: SUS316L (fresh water), Titanium alloy (Ocean marine); Cable: PUR
Storage temperature	-15-50°C
Measuring temperature	0-45°C (Non-freezing)
Weight	3.2KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10M,the maximum may be extended to 100m



BH-485-ION Digital Online Ion Sensor

BH-485-ION is a digital ion sensor with RS485 communication and standard Modbus protocol. Housing material is corrosion-resistant (PPS+POM), IP68 protection, suitable for most water quality monitoring environments; This online ion sensor uses an industrial-grade composite electrode, the reference electrode double salt bridge design and have longer working life; Built-in temperature sensor and compensation algorithm, high precision; It has been widely used in domestic and foreign scientific research institutions, chemical production, agricultural fertilizer, and organic waste water industries. It is used for the detection of general sewage, waste water and surface water. It can be installed in sink or flow tank.



2. Technical Specification

Model	BH-485-ION Digital Ion Sensor
Ions type	F ⁻ , Cl ⁻ , Ca ²⁺ , NO ₃ ⁻ , NH ₄ ⁺ , K ⁺
Range	0.02-1000ppm(mg/L)
Resolution	0.01mg/L
Power	12V (customized for 5V, 24VDC)
Slope	52~59mV/25℃
Accuracy	<±2% 25℃
Response time	<60s (90% right value)
Communication	Standard RS485 Modbus
Temperature compensation	PT1000
Dimension	D:30mm L:250mm, cable:3meters(it can be extended)
Working environment	0~45℃ , 0~2bar

3.Reference Ion

Ion Type	Formula	Interfering ion
Fluoride ion	F^-	OH^-
Chloride ion	Cl^-	CN^- , Br^- , I^- , OH^- , S^{2-}
Calcium ion	Ca^{2+}	Pb^{2+} , Hg^{2+} , Si^{2+} , Fe^{2+} , Cu^{2+} , Ni^{2+} , NH_3 , Na^+ , Li^+ , $Tris^+$, K^+ , Ba^+ , Zn^{2+} , Mg^{2+}
Nitrate	NO_3^-	ClO_4^- , I^- , ClO_3^- , F^-
Ammonium ion	NH_4^+	K^+ , Na^+
Potassium	K^+	Cs^+ , NH_4^+ , Tl^+ , H^+ , Ag^+ , $Tris^+$, Li^+ , Na^+

BH-485-NH Digital Ammonia Nitrogen Sensor

The BH-485-NH is digital online ammonia nitrogen sensor and with RS485 Modbus,it measure the ammonia nitrogen concentration by an ion selective electrode method. The ammonium ion selective electrode directly detects the ammonium ion in the water environment to determine the concentration of ammonia nitrogen. Use a pH electrode as a reference electrode for better stability. The concentration of ammonia nitrogen in the measurement process is easily interfered by potassium ions, so potassium ion compensation is required.

The digital ammonia nitrogen sensor is an integrated sensor that is composed of ammonium ion selective electrode, potassium ion (optional), pH electrode and temperature electrode. These parameters can mutually correct and compensate the measured value of ammonia nitrogen, and meanwhile achieve the measurement for multiple parameters.

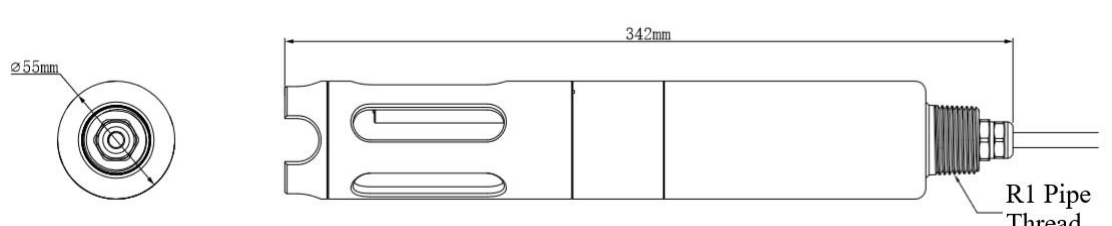
Application

It is widely used to measure the value of ammonia nitrogen in the nitrification treatment and aeration tanks of the sewage treatment plants, industrial engineering as well as river water.

Technical Parameters

Specification	Details
Measurement Range	NH ₄ N: 0.1-1000 mg/L K+: 0.5-1000 mg/L(Optional) pH: 5-10 Temperature: 0-40°C
Resolution	NH ₄ N: 0.01 mg/l K+: 0.01 mg/l (Optional) Temperature: 0.1°C pH: 0.01



Measurement Accuracy	NH4N: $\pm 5\%$ of the measured value or ± 0.2 mg/L, take the greater one. K+: $\pm 5\%$ of the measured value or ± 0.2 mg/L (Optional) Temperature: $\pm 0.1^{\circ}\text{C}$ pH: ± 0.1 pH
Response Time	≤ 2 minutes
Minimum Detection Limit	0.2mg/L
Communication Protocol	MODBUS RS485
Storage Temperature	-15 to 50°C (Non-frozen)
Working Temperature	0 to 45°C (Non-frozen)
Size	55mm \times 340mm (Diameter*Length)
Weight	<1KG;
Level of Protection	IP68/NEMA6P;
Length of Cable	Standard 10-meter long cable, which can be extended to 100 meters
Outer Dimension: 	

BH-485-NO3 Digital Nitrate Nitrogen Sensor

Measuring Principle

NO₃-N will be absorbed at 210 nm UV light. When the Spectrometer Nitrate sensor is working, the water sample flows through the slit. When the light from the light source in the sensor passes through the slit, part of the light is absorbed by the sample flowing in the slit, and the other light passes through the sample and reaches the other side of the sensor. Calculate the concentration of nitrate.

Main Features

- 1) Nitrate nitrogen sensor is directly measurement without sampling and pre-processing.
- 2) No chemical reagents, no secondary pollution.
- 3) Short response time and continuous online measurement.
- 4) The sensor has an automatic cleaning function that reduces maintenance.
- 5) Sensor power supply positive and negative reverse connection protection.
- 6) Sensor RS485 A/B terminal is connected to the power supply protection



Application

- 1) Drinking water /surface water
- 2) Industrial production process water / sewage treatment, etc.,
- 3) Continuously monitor the concentration of nitrate dissolved in water, especially for monitoring sewage aeration tanks, controlling denitrification process

Technical Parameters

Principle	Colorimetric
Measuring Range	Nitrate nitrogen NO ₃ -N: 0.1~50.0mg/L(2mm)
Accuracy	±5%
Repeatability	± 2%
Resolution	0.01 mg/L

Pressure range	≤0.4Mpa
Sensor material	Body:SUS316L(freshwater), Titanium alloy(Ocean marine); Cable:PUR
Calibration	Standard calibration
Power Supply	DC:12VDC
Communication	MODBUS RS485
Working temperature	0-45°C(Non-freezing)
Dimensions	Sensor:Diam69mm*Length 380mm
Protection	IP68
Cable length	Standard:10M,the maximum can be extended to 100m