

CLEAN INSTRUMENTS provide for you the most suitable pH/ORP sensors

based on

Innovation on the sensitive film;

Improvement on reference system performance;

Mature glass craftwork and rigorous sealing procedure;

Abundant electrochemical knowledge and application experience.

The pH/ORP sensors we manufactured are beyond your expectations.



Best Value  
Smart Choice

## pH/ORP Sensors and Applications



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科霖仪器  
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Designed for Industrial harsh and complex Environment (Red head sensor)

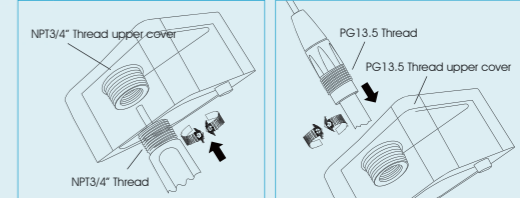
SNEX pH/ORP sensor 3/4" NPT **Red head sensor**

- PPS Body
- pH Range: 0-14, (ORP±1000mV).
- Temp Range: 0 - 90°C
- Temp Sensor: Pt1000/Pt100/NTC10K.
- Ref: SNEX Ag/AgCl/KCl
- NPT 3/4" thread
- Pressure: 0 -20 bar(@50°C)
- Cable: 5m coaxial cable, BNC.



**A580 enclosed flow cell**

Material: Polycarbonate
Interface: PG13.5 or 3/4" NPT fitting
Connecting tube: 10X6.5 mm tubing
Temperature: 0-50°C
Pressure:0-3bar
Size: 83(L) X 69(W)X230(H)mm



**CS1768 pH Sensor**

Designed for Harsh Industrial environment  
Sludge, Viscous Fluids Protein, hydrogen sulfide, Cold Low Ionic Water Silicates, Chromates, Cyanide, Sea water, Brine, Mining, Petrochemical, liquefied natural gas.

SNEX, solid-state, non-exchange reference electrode system, Double junction  
Sensitive film part no.: B11

**CS1778 pH Sensor**

Designed for flue gas desulfurization  
Traditional porous-liquid-junction pH sensors easy to be failed by reference electrode coating and contamination or fine particle clogging, poisoning.

CS1778 SNEX pH sensor solid-state, non-exchange reference electrode system, anti-poison design and super large active reference area enables long life span of the sensor.  
Sensitive film part no.: B11

**CS1788 pH Sensor**

Designed for Ultra-pure Water/  
Low ion concentration

The red SNEX solid-state reference electrode system sustained releases potassium ion and chlorine ion, in addition to two sets of reference electrolyte permeability pores ensure stable and reliable readings.

Sensitive film part no.: W02

**CS2768 ORP Sensor**

Complex Industrial environment  
Anti-poison, long life span ORP sensor

SNEX, solid-state, non-exchange reference electrode system, Double junction  
Sensitive film part no.: Pt

**PH3000/PH5000**

pH/ORP  
Controller/Transmitter





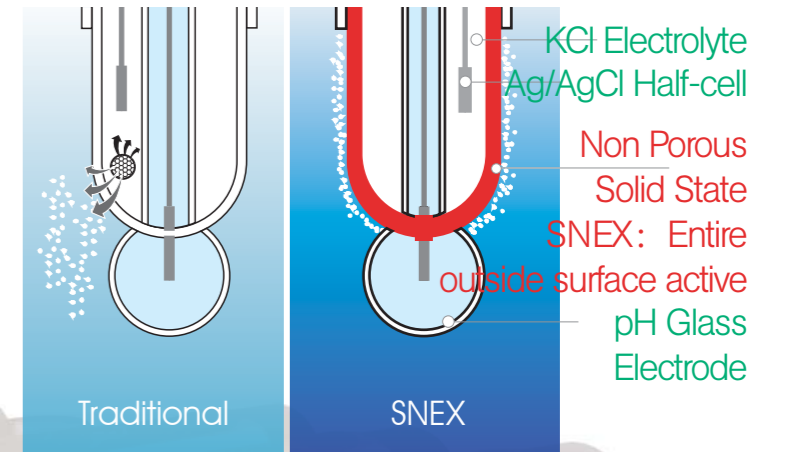


Designed for Industrial harsh and complex Environment  
SNEX pH/ORP sensor PG13.5  $\Phi$ 12mm

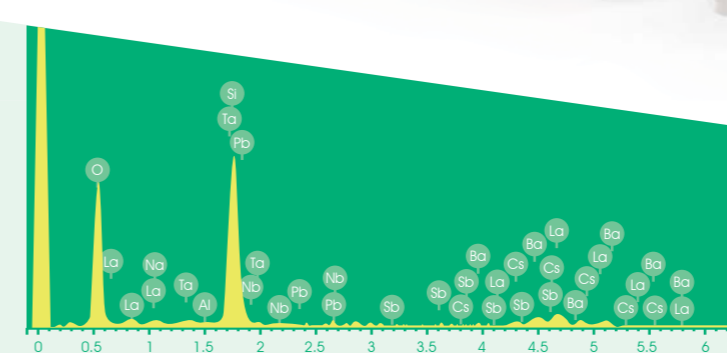
Revolutionary "SNEX solid-state, non-exchange reference electrode system":  
break the life span limit of the traditional porous-liquid-junction pH sensors.

Application: Sludge, Viscous Fluids Protein, hydrogen sulfide, Cold Low Ionic Water Silicates, Chromates, Cyanide, Sea water, Brine, Mining, Petrochemical, liquefied natural gas.

SNEX, solid-state, non-exchange reference electrode system: it uses a highly stable non-porous polymeric interface in place of the traditional porous liquid junction. The electrochemical active reference area is the whole of the outside surface of the electrode, this super large contact area means that the electrode is supremely resistant to coatings. Poisoning effects are eliminated because the polymeric reference material is ionically conductive, but is not porous, consequently electrolyte and process fluids are not exchanged. The advanced solid-state nature of SNEX reference electrodes mean they remain extremely accurate and reliable across a wide range of conditions, including: Temperature: 0 to 90°C, Pressure: 0 to 20 bar.



SNEX: stable and longer life span, lower calibration and maintenance cost.



CLEAN  
pH Sensitive film

CS1668 pH sensor

Sludge, Viscous Fluids Protein, hydrogen sulfide, Cold Low Ionic Water Silicates, Chromates, Cyanide, Sea water, Brine, Mining, Petrochemical, liquefied natural gas.

Sensitive film part no.: B11  
Temperature: Pt1000  
PA+GF body. 12mm diameter. PG13.5 thread.  
5m connecting cable with BNC.

CS1568 pH sensor

Sludge, Viscous Fluids Protein, hydrogen sulfide, Cold Low Ionic Water Silicates, Chromates, Cyanide, Sea water, Brine, Mining, Petrochemical, liquefied natural gas.

Sensitive film part no.: B11  
Temperature: Pt1000  
Glass body. 12mm diameter. PG13.5 thread.  
5m connecting cable with BNC.

CS2668 ORP sensor

Sludge, Viscous Fluids Protein, hydrogen sulfide, Cold Low Ionic Water Silicates, Chromates, Cyanide, Sea water, Brine, Mining, Petrochemical, liquefied natural gas.

Sensitive film part no.: Pt  
PC body. 12mm diameter. PG13.5 thread.  
5m connecting cable with BNC.



B11 (Blue)

pH range: 0-14pH  
Impedance range: 120-675 M $\Omega$   
Temperature range: -10-120 C  
Response time: 15seconds



W02 (White)

pH range: 0-12pH  
Impedance range: 45-360M $\Omega$   
Temperature range: -10-110 C  
Response time: 15seconds



Y01 (Yellow)

pH range: 0-14pH  
Impedance range: 120-675 M $\Omega$   
Temperature range: -10-130 C  
Response time: 15seconds



W28 (White)

pH range: 0-12pH  
Impedance range: 45-360M $\Omega$   
Temperature range: -10-110 C  
Response time: 15seconds



# Designed for HF environment

## SNEX pH/ORP Sensor



# Designed for Chemical process

## pH/ORP sensor



CS1628 CS1637 CS2628 CS1728 CS1737



### CS1637 pH antimony sensor

HF concentration > 1000ppm

2-9pH, 0-80 °C, 0-10bar(@50°C)  
SNEX, solid-state, non-exchange reference electrode system, Double junction  
Sensitive film part no.: antimony  
Temperature: Pt1000  
PA+GF body. 12mm diameter.  
5m connecting cable with BNC.



### CS2628 resistant to HF ORP sensor

-1000mV-1000mV, 0-80 °C, 0-10bar(@50°C)  
SNEX, solid-state, non-exchange reference electrode system, Double junction  
Sensitive film part no.: Pt  
PA+GF body. 12mm diameter.  
5m connecting cable with BNC.



### CS1728 resistant to HF pH sensor

HF concentration < 1000ppm

0-12pH, 0-80 °C, 0-10bar(@50°C)  
SNEX, solid-state, non-exchange reference electrode system, Double junction  
Sensitive film part no.: W28  
Temperature: Pt1000  
PPS body. 3/4" NPT thread  
5m connecting cable with BNC.



### CS1628 resistant to HF pH sensor

HF concentration < 1000ppm

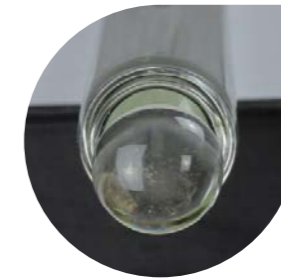
0-12pH, 0-80 °C  
SNEX, solid-state, non-exchange reference electrode system, Double junction  
Sensitive film part no.: W28  
Temperature: Pt1000  
PA+GF body. 12mm diameter.  
5m connecting cable with BNC.



### CS1737 pH antimony sensor

HF concentration > 1000ppm

2-9pH, 0-80 °C, 0-10bar(@50°C)  
SNEX, solid-state, non-exchange reference electrode system, Double junction  
Sensitive film part no.: antimony  
Temperature: Pt1000  
PPS body. 3/4" NPT thread



### CS1543 pH sensor

0-14pH, -10-100 °C, 0-6bar  
Porous Ceramic pore liquid junction  
Ag/AgCl Ref with Ag+ ion trap(or SNEX anti-poison internal system). Double junction.  
Sensitive film part no.: Y01  
Temperature: Pt1000 or Pt100(optional)  
Glass body. PG13.5 thread.  
5m connecting cable with BNC.



### CS1549 pH sensor

0-14pH, -10-100 °C, 0-6bar  
Porous Ceramic pore liquid junction  
Ag/AgCl Ref with Ag+ ion trap(or SNEX anti-poison internal system). Double junction.  
Sensitive film part no.: Y01  
With Ref electrolyte supplementary port.  
Temperature: Pt1000 or Pt100(optional)  
Glass body. PG13.5 thread.  
5m connecting cable with BNC.





# Designed for Environmental waste water

pH/ORP sensor

Economical, stable and reliable pH/ORP sensor specially for environmental waste water.



## CS1733 pH sensor

0-14pH, 0-80 °C, 0-6bar  
Ag/Agcl KCL Ref with Ag+ ion trap(or SNEX anti-poison internal system). Double junction.  
Sensitive film part no.: B11  
3/4" NPT thread, PPS body.  
5m connecting cable with BNC.

## CS1753 pH sensor

Process pH sensor with temperature compensation and connect to ground.(connect to ground is optional)

0-14pH, 0-80 °C, 0-6bar  
Ag/Agcl KCL Ref with Ag+ ion trap(or SNEX anti-poison internal system). Double junction.  
Sensitive film part no.: B11  
3/4" NPT thread, PPS body.  
5m connecting cable with BNC.  
Pt1000, Pt100, TH10K temperature sensor optional

## CS2733 ORP sensor

General Purpose

-1000mV-1000mV, 0-80°C, 0-6bar  
Ag/Agcl KCL Ref with Ag+ ion trap(or SNEX anti-poison internal system). Double junction.  
Sensitive film part no.:Pt  
3/4" NPT thread, PPS body.  
5m connecting cable with BNC.

## CS1540 pH sensor

Versatile anti- poison Environmental waste water pH sensor

0-14pH, 0-80 °C, 0-10bar  
SNEX, solid-state, non-exchange reference electrode system, Double junction.  
316L Stainless Steel body. 13mm diameter.  
PG13.5 thread, 5m connecting cable with BNC.  
(Pt1000, Pt100, TH10K temperature sensor, connect to ground, optional)

## CS2753 ORP sensor

Designed for strong oxidative solution

-1000mV-1000mV, 0-80 °C, 0-6bar  
Ag/Agcl KCL Ref with Ag+ ion trap(or SNEX anti-poison internal system). Double junction.  
Sensitive film part no.: Gold  
3/4" NPT thread, PPS body.  
5m connecting cable with BNC.



## Standard Solutions, starting point of electrochemical measurement.

Using standard solutions to calibrate electrochemical instruments, is the starting point of measurement. Whether the standard solution is "standard", will determine the effectiveness of the readings. A series of quality certification standards such as GMP, ISO9001, GLP, etc, become increasingly important. All the calibration procedure is assumed the standard solution used is accurate. "Traceable" is the fundamental basis to prove the readings, procedures or standard solutions is conforming to the standard. CLEAN NIST traceable standard solutions are conforming to the traceable standards of NIST USA (National Institute of standards and technology), which guarantee the traceability of standard solutions offered and maximumly reduce the measurement deviation. Enabling you a fast and accurate electrochemical measurement experience.

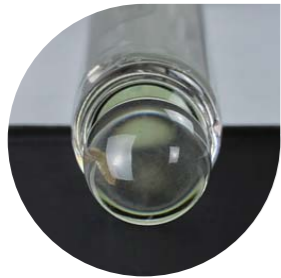
## CLEAN pH/ORP Standard Solutions NIST traceable

- CPB401BT pH4.01 Standard Solutions, 500ml
- CPB700BT pH7.00 Standard Solutions, 500ml
- CPB1001BT pH10.01 Standard Solutions, 500ml





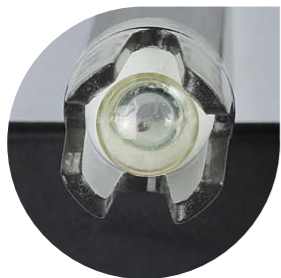
# Lab/Portable pH/ORP sensor



## CS1020 pH sensor

### General purpose

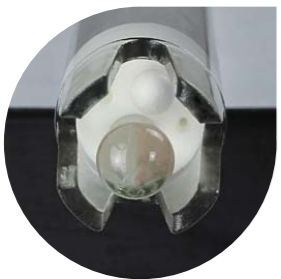
0-14pH, 0-80°C.  
Ag/AgCl KCL Ref .  
porous ceramics liquid junction  
Sensitive film part no.: B11  
Glass body. Diameter: 12mm  
1m connecting cable with BNC.



## CS1010 pH sensor

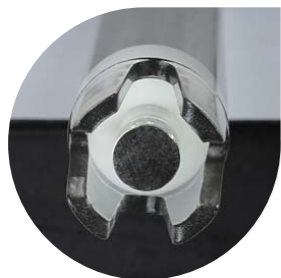
### General purpose

0-14pH, 0-80°C.  
Ag/AgCl KCL Ref .  
Silica gel double core liquid junction  
Sensitive film part no.: B11  
PC clear body. Diameter: 12mm  
1m connecting cable with BNC.



## CS1030 pH 3-in-1 sensor

0-14pH, 0-80°C.  
Ag/AgCl KCL Ref .  
Silica gel double core liquid junction  
Sensitive film part no.: B11  
Temperature sensor: TH10K  
PC clear body. Diameter: 12mm  
1m connecting cable with BNC.



## CS2010 ORP sensor

### General purpose

-1000mV-1000mV, 0-80°C  
Ag/AgCl KCL Ref .  
Silica gel double core liquid junction  
Sensitive film part no.: Pt  
PC clear body. Diameter: 12mm  
1m connecting cable with BNC.



CS1020

CS1010

CS1030

CS2010

CS1058

CS2058

CSR168



## CS1058 SNEX pH sensor

pH combination sensor designed for Harsh Industrial environment. Viscous Fluids Protein, particles, organic solvent, hydrogen sulfide, Cyanide etc.

0-14pH, 0-80°C.  
SNEX solid-state non-exchange reference electrode system, Double junction.  
Glass body. Diameter: 12mm  
1m connecting cable with BNC.



## CS2058 SNEX ORP sensor

ORP sensor designed for Harsh Industrial environment. Viscous Fluids Protein, particles, organic solvent, hydrogen sulfide, Cyanide etc.

-1000mV-1000mV, 0-80°C.  
SNEX solid-state non-exchange reference electrode system, Double junction.  
Glass body. Diameter: 12mm  
1m connecting cable with BNC.



## CSR168 SNEX Ref. sensor

Ref. sensor designed for Harsh Industrial environment. Viscous Fluids Protein, particles, organic solvent, hydrogen sulfide, Cyanide etc.

0-80°C.  
Ag/CL solid-state non-exchange reference electrode system, Double junction.  
PA + GF body. Diameter: 12mm  
1m connecting cable with BNC.



## PH200/PH500

pH/ORP  
Portable/ Benchtop