



THE PROFESSION'S TRANSMITTER MANUFACTORY



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Yuyao Huangong Automatic Instruments Factory**

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## Company Profile

Ningbo Qingyang automation technology co.,ltd (Yuyao Huangong automation instruments factory) was established in 2000, specializing in the industrial automation products. After years of development, has developed a series of stable and reliable, affordable, suitable for all kinds of industrial automation measurement and control of pressure transmitter, temperature transmitter and level transmitter. Company products have been widely used in petroleum, chemical industry, metallurgy, environmental protection, light industry, medical, defense, Marine, aerospace, power plant operation inspection, hydraulic, pneumatic system and other industries. Products also have been exported to many countries and areas.

- The products are divided to
- Pressure/level series
  - Temperature series
  - Others
  - OEM



Qingyang Tech  
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# THE PROFESSION'S TRANSMITTER MANUFACTORY

[www.huangong.com](http://www.huangong.com)  
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## PB8100 Series pressure transmitter



- Accuracy: 0.25%FS, 0.5%FS
- Measuring range: -0.1...0bar to -1...0bar  
0...0.1bar to 0...600bar to -1...25bar  
0...1bar to 0...35bar absolute
- Linearity: superior to 0.25%FS
- Stability: superior to 0.25%FS for 1 year
- Temperature drift: superior to  $\pm 0.75\%$ (0 to 50°C)
- Response time:  $\leq 10\text{ms}$
- Power supply: 12...36VDC
- Output: 4...20mA (or 1...5V)
- Load resistance: 0 to 600Ω
- Proof pressure: 150%FS
- Process connection: M20\*1.5 or 1/2NPT,  
Flange, Clamp or customized
- Electric connection: M20\*1.5
- Protection: IP65
- Wetted parts: 304 stainless steel
- Diaphragm material: 316L stainless steel
- Housing material: cast aluminum
- Weight: above
- Power supply: <0.5W (24VDC)
- Ambient temp: -20...85°C
- Compensated Temp: -20...85°C
- Storage temp: -45...125°C

## PB8200 Series pressure transmitter



- Accuracy: 0.25%F S , 0.5%F S
- Measuring range: - 0.1...0bar to -1...0bar  
0-0.1bar to 0...600bar or -1...25bar relative  
0-1bar to 0-35bar absolute
- Linearity: superior to 0.25%F S
- Stability: superior to 0.25%F S for 1 year
- Temperature drift: superior to  $\pm 0.75\%F S$  (0 to 50°C)
- Response time:  $\leq 10mS$
- Power supply: 12 to 36VDC
- Output: 4...20mA (or 1...5V)
- Load resistance: 0 -600  $\Omega$
- Proof pressure: 150%F S
- Ambient temp: -20...85°C
- Compensated temp: -20...85°C
- Storage temp: -45...125°C
- Process connection: M20\*1.5male or 1/2 NPT male,  
Flange,Clamp or customized
- Electric connection: M20\*1.5male  
protection: IP65
- Wetted materials: 304 stainless steel
- Diaphragm material: 316L stainless steel
- Housing material: cast aluminum
- Weight: above
- Power consume: <0.5W (24VDC)

## PB8300 Series pressure transmitter



- Accuracy: 0.25%F S , 0.5%F S
- Measuring range: -0.1...0bar to -1...0bar  
0...0.1bar to 0...600bar to -1...25bar relative  
0...1bar to 0...35bar absolute
- Linearity: Superior to 0.25%F S
- Stability: superior to 0.25%F S
- Temperature drift: superior to  $\pm 0.75\%F S$  (0...50°C)
- Response time:  $\leq 10mS$
- Power supply: 24VDC or (12VDC...36VDC optional)
- Output: 4...20mA (or 1...5V)
- Load resistance: 0 -600  $\Omega$
- Proof pressure: 150%F S
- Ambient temp: -20...85°C
- Compensated temp: -20...85°C
- Storage temp: -45...125°C
- Process connection: M20\*1.5male or 1/2 NPT male,  
Flange or clamp or customized
- Electric connection: DIN43650-A/ISO standard  
junction box
- Wetted parts: 304 stainless steel
- Diaphragm Material: 316L stainless steel
- Housing Material: 304 stainless steel or 316 stainless  
steel
- Weight: above
- Power Consume: <0.5W (24VDC)

## PB8400 Series pressure transmitter



- Accuracy: 0.25%F S, 0.5%F S
- Measuring range: -0.1...0bar to -1...0bar  
0-0.1bar to 0...600bar or -1...25bar relative  
0-1bar to 0-35bar absolute
- Linearity: superior to 0.25%F S
- Temperature drift: superior to  $\pm 0.75\%F S(0 \text{ to } 50^{\circ}C)$
- Stability: superior to 0.25%F S for 1 year
- Response time:  $\leq 10mS$
- Power supply: 12...36VDC
- Output: 4...20mA (or 1...5V)
- Load resistance: 0 -600 $\Omega$
- Proof pressure: 150%F S
- Ambient temp: -20...85 $^{\circ}C$
- Compensated temp: -20...85 $^{\circ}C$
- Storage temp: -45...125 $^{\circ}C$
- Process connection: M20\*1.5male or 1/2 NPT male, Flange or clamp or customized
- protection: IP65
- Wetted material: 304 stainless steel
- Diaphragm material: 316L stainless steel
- Housing material: 304 stainless steel or 316 stainless steel
- Weight: above
- Power consume: <0.5W (24VDC)

## Smart pressure transmitter



- Accuracy: 0.2%F S, 0.5%F S
- Measuring range: -0.1...0bar to -1...0bar  
0...0.1bar to 0...600bar to -1...25bar relative  
0...1bar to 0...35bar absolute
- Output: 4...20mADC
- Linearity: superior to 0.2%F S
- Ambient temp: -20...85
- Temperature drift: Superior to  $\pm 0.2\%F S/^{\circ}C$
- Stability: superior to 0.2%F S for 1 year
- Power supply: 12...36VDC
- Load resistance: 0 -600  $\Omega$
- Proof pressure: 150%F S
- Storage temp: -40...125
- Can modify the range of transmitter with scene.

## APB Series pressure transmitter



- Accuracy: 0.5%F S, 1%F S,
- Measuring range: 0...6bar  
0...10bar  
0...16bar
- Linearity: Superior to 0.5%F S
- Response time:  $\leq 10\text{ms}$
- Power supply: 12 to 36VDC
- Output: 4...20mA or 1...5V
- Load resistance: 0-600 $\Omega$
- Proof pressure: 150%F S
- Ambient temp: -20...85 $^{\circ}\text{C}$
- Storage temp: -40...125 $^{\circ}\text{C}$
- Process connection: G1/4 BSP(or customized)
- Wetted parts: Stainless steel or copper
- Power consume: <0.5W(24VDC)

## SPB3051 Series pressure transmitter



- Accuracy:  $\pm 0.25\%$  to  $\pm 0.075\%$
- Ambient Temp effect/28 $^{\circ}\text{C}$   
Scale ratio from 1:1 to 10:1 :  $\leq \pm 0.2\%$   
Minim scale( $\leq 1.5\text{Kpa}$ ):  $\pm 0.5\%$
- Influence of pressure:
- Zero error (can eliminate under static pressure) :
- Static pressure: 0 to 13.7Mpa,  $\pm 0.2\%/6.9\text{Mpa}$   
Over 13.7Mpa,  $\pm 0.5\%/6.9\text{Mpa}$   
13.7Mpa,  $\pm 0.5\%/6.9\text{Mpa}$
- Full scale error:  $\pm 0.25\%/6.9\text{Mpa}$   
Stability 60months, 0.25%F S, 28 $^{\circ}\text{C}$
- Max pressure :6.9Mpa, scale for 1:1
- Place influence
- Move less than 250Pa on zero,no influence for scale
- General performance  
 $\pm 0.25\%$ (scale of 1:1, 28 $^{\circ}\text{C}$  changeable,6.9Mpa)
- Vibration influence(except minim scale)
- Measure random axis <  $\pm 0.1\%$ F S(15 to 2000Hz)
- Influence of power supply:effect  $\leq 0.05\%/V$
- Isolation and reverse polarity protection
- No arc light under 50Hz,100Vpp
- No damage when reverse connection under 24VDC
- Power supply:12...45VDC
- Ambient Temp: -20 $^{\circ}\text{C}$ ...85 $^{\circ}\text{C}$
- Storage Temp: -40 $^{\circ}\text{C}$ ...104 $^{\circ}\text{C}$
- Relative humidity:0...90%
- Diaphragm material: 316L, Hastelloy C, Monel,Ta,  
stainless steel ,optional
- protection: IP67
- Fill fluid: silicone oil, Glyceride and water

## PB8600 Series submersible hydrostatic level transmitter



1



2



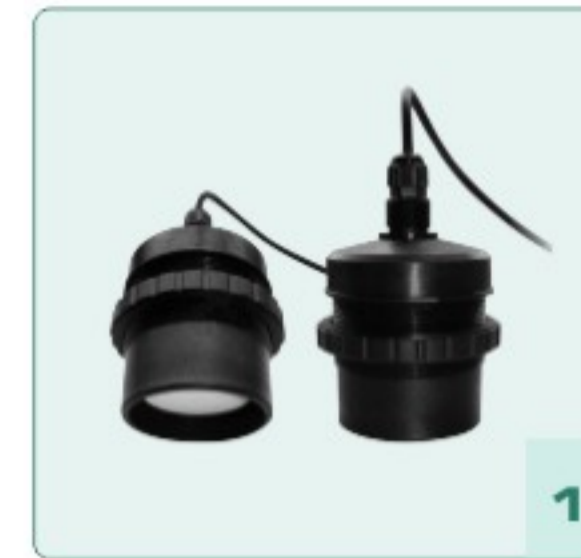
3



4

- Accuracy: 0.5%F S
- Measuring range: 0...5m to 0...1500m
- Linearity: superior to 0.2%F S
- Temperature drift: <superior to  $\pm 0.03\%F S/^{\circ}C$
- Stability: superior to 0.5%F S for 1 year
- Response time: 10mS
- Power supply: 12 to 36VDC
- Output: 4...20mADC
- Load resistance: 0 -600 $\Omega$
- Liquid temp: -10...60 $^{\circ}C$
- Compensated temp: -10...60 $^{\circ}C$
- Storage temp: -45...125 $^{\circ}C$
- Installation position: direct into the bottom of the liquid
- Housing material: 304 stainless steel or 316 stainless steel
- Diaphragm material: 316L stainless steel
- Breathing cable material: polythene or PTFE
- Weight: Stainless steel pipe(G1): about 300g  
Breathing cable(G2): about 65g/m  
Junction box(G3):above
- Gross weight(G):  $G=G1+G2*\text{length}(m)+G3$
- Power consume: <5W(24VDC)

## HG-L300 Series Ultrasonic level transmitter



1



2

- Measuring range: 0~15m (According to the measured range selected)
- Blind spot : 0.45m~0.6m
- Measuring precision:  $\pm 0.25\%$  (Standard conditions)
- Measuring resolution: 1mm
- Pressure: ordinary pressure
- Instrument display: with LCD display
- Analog output: 4~20mA
- Power: DC24V
- Environment temperature: -20 $^{\circ}C$  ~ +60 $^{\circ}C$
- Protection grade: IP65

## PB8700 Series submersible hydrostatic level & temperature transmitter



1



2

- Accuracy: 0.5%F S
- Measuring range: liquid level: 0...0.5m, up to 1500m  
temperature: 0...70 $^{\circ}C$
- Linearity: superior to 0.2%F S
- Temperature drift: superior to  $\pm 0.03\%F S/^{\circ}C$
- Stability: superior to 0.5%F S for 1 year
- Response time: 10mS
- Power supply: 12 to 36VDC
- Output: 4...20mADC
- Load Resistance: 0 -600 $\Omega$
- Liquid temp: -10...60 $^{\circ}C$
- Compensated temp: -10...60 $^{\circ}C$
- Storage temp: -40...125 $^{\circ}C$
- Installation position: Direct into the bottom of the liquid
- Housing material: 304stainless steel or 316 stainless steel
- Diaphragm material: 316stainless steel
- Breathing cable: Polythene or PTFE
- Weight: Stainless steel pipe(G1): about 500g  
Breathing cable(G2): about 65g/m  
Junction box(G3): above
- Gross weight(G):  $G=G1+G2*\text{length}(m)+G3$
- Power consume: <0.5W+0.5W(24VDC)

## PB8900 Series pressure switch & pressure transmitter



- Accuracy: 0.2%F S 0.5%F S
- Linearity: Superior to 0.2%F S
- Indication error: 0.5%F S
- Measuring range: -0.1...0bar to -1...0bar  
0...0.1bar to 0...600bar to -1...25bar relative  
0...1bar to 0...35bar absolute
- Output: 4...20mADC
- Control output: PNP switch or relay contact
- relay contact maximum current: 1A
- Ambient temp: -20...85°C
- Temperature drift: superior to  $\pm 0.02\%F S/^\circ C$
- stability: superior to 0.2%F S for 1 year
- Power supply: 14 to 36VDC
- Load resistance: 0 -600 $\Omega$
- Proof pressure: 150%F S
- Storage temp: -40...125°C

## Digital pressure gauge/ pressure controller



- Measure range: -1...0bar, -1...1bar, -1...0.6bar, -1...10bar, -1...20bar, -1...25bar  
0...0.1bar, 0...0.2bar, 0...0.35bar, 0...0.6bar, 0...1.0bar, 0...2.0bar,  
0...3.5bar, 0...6bar, 0...10bar, 0...20bar, 0...35bar, 0...60bar, 0...100bar,  
0...200bar, 0...350bar, 0...600bar
- Power supply: 3...4.5VDC or 24VDC  
AA battery or 3.6V lithium battery
- Accuracy: 0.25%F S, 0.5%F S, 1.0%F S
- Sample rate: 80 times/S
- Proof pressure: 150%F S
- Ambient temp: 10...60°C
- Storage temp: -45...125°C
- Maxium switching current/voltage: 5A/250VAC
- Wetted parts: 304 stainless steel
- Diaphragm material: 316 stainless steel
- Housing material: square: ABS                      round: stainless steel
- Weight: square: 400g                                  round: 450g
- Protection: IP65



## SBWZ246PS/K29 Series -Integral Temperature Transmitter/Temperature Switch



- Accuracy: 0.2%F S or 0.5%F S
- Linearity: superior to 0.2%F S
- Indication error: 0.5%F S
- Measuring range: RTD -200...600°C optional
- Output: 4...20mADC
- Control output: PNP switch or relay contact
- Relay contact maximum current: 1A
- Ambient Temp: -25...85°C
- Temperature drift: superior to 0.2%F S/°C
- Stability: superior to 0.2%F S for 1 year
- Power supply: 12 to 36VDC
- Load resistance: 0-600Ω
- Storage Temp: -40...125°C
- Can provide 1-2 ways control and alarm output
- the values of control or alarm can be arbitrarily set in the ranges by press buttons

## WZ/WR Series -Thermal Resistance, Thermocouple



### Thermal resistance

- Thermal resistance species: copper heat resistance  
platinum thermal heat resistance
- Process connection: screw or flange connection
- Junction box: water proof connector  
flameproof terminal box or etc
- Diameter: copper heat resistance: 12\*1mm or customized  
platinum thermal resistance: 16\*1mm or 12\*1mm  
or customized
- Circuit type: 2-, 3-, 4-wire
- Tolerance class: A,B,C
- Sensor: Pt10, Pt100, Pt50, Pt500, Pt1000, Cu50, Cu100
- Protecting tube material: 304, 316 stainless steel or etc
- Insert depth: optional

### Thermocouple

- Sensor: K,N,E,J,T,S,R,B,W3,W5
- Process connection: screw or flange
- Junction box: water proof connector  
flameproof terminal box  
or etc
- Tolerance class: I, II, P
- Length: optional
- Protecting tube material: 304, 316  
stainless steel or etc
- Insert depth: optional

## SBWZ/R Series -Integral temperature transmitter



- Accuracy:  $\pm 0.2\%F S$ ,  $\pm 0.5\%F S$   
(including linearity, hysteresis and repeatability)
- Output (2 wires): 4...20mA
- Power supply: 12...36VDC (or 24VDC)
- Ambient temp: -25...85°C
- Storage temp: -45...125°C
- Humidity: 5...95%
- Accuracy of the indicator:  $\pm 2.5\%$ (100% scale)  
 $\pm 1.0\%$ (LED)  
 $\pm 1.0\%$ (LCD)
- Power consume: <0.5W (24VDC)
- Process connection: clamp, flange, screw
- Sensor: RTD/TC
- RTD: Pt100, Pt1000, Pt500
- TC: K, E, S, J, T, etc
- Range: optional
- Internal cold junction for TC
- Material: 304, 316 stainless steel, Corundum tube, etc
- Diameter:  $\varnothing 4, \varnothing 6, \varnothing 8, \varnothing 10$
- with explosion-proof properties
- Local indicator: LCD, LED
- Insert depth, the length and diameter size can be customized
- Can be anti-corrosion features: to protect pipe line four fluorine

## SBWZ/R Temperature Transmitter Modul



- Accuracy:  $\pm 0.1\%F S$   
 $\pm 0.2\%F S$   
 $\pm 0.5\%F S$
- Output: 4...20mA
- Stability:  $\pm 0.5\%F S$  for 1 year
- Load resistance: 0...600 $\Omega$
- Power supply: 12 to 36VDC
- Ambient temp: -25°C...85°C
- Storage temp: -45°C...125°C
- Response time:  $\leq 10ms$
- Power consume: <0.5W (24VDC)
- Input: RTD/TC/mV
- RTD: Pt100, Pt500, Pt1000, 2-, 3- wires  
2xPt100, 2xPt500, 2xPt1000, 2-, 3- wires (such as pic 6)  
TC: K, J, T, E, M, S, B, R
- Internal cold junction for TC
- The range can be customized
- Galvanic isolation: 1500VAC (optional) (such as pic 10)

## HGP-1000 -Battery Powered Temperature Display/Transmitting Instrument



### Advantage

1. It use platinum RTD (Pt1000 or Pt100 temperature sensor) as the temperature measuring element. Wide range and good linearity and high accuracy.
2. Large scene, liquid crystal display.
3. Practical and beautiful whole sealing structure. Suitable for corrosion in vibration and sputtering sites.
4. Low power cost, one lithium battery can be used 2 to 3 years.
5. Instrument has no mechanical transmission and wearing parts, long service time.
6. For customer requirements can supply 4-20mA single according to ranges.
7. Process connection, insert depth and diameter size can be customized.

### Application

The instrument adopts the way of internal batteries, digital display temperature function all the time, which can directly measure gas and liquid temperature, suitable for boiler, power station, oil pipeline, oil tank, wine, chemical, pharmaceutical, food, textile, paper making, electroplating, disinfection cabinet, tap water, brewing, electrical and mechanical equipment bearing shell, petrochemical industry.

## QYISO-100 Series -Passive Isolation Module



- Accuracy: 0.5%F S
- Temperature drift: superior to 0.02%F S/°C
- Ambient temp: -20...85°C
- Storage temp: -40...125°C
- Power supply: 12...28VDC
- Size: 22.5\*100\*115mm
- Isolation voltage: 1500VDC
- 1-, 2-, ways (optional)
- Designs for DIN rail
- Input: 4-20mA
- Output: 4-20mA

## SMA/SMZ Series -Digital Display Instrument



1



2

- Accuracy: 0.5%F S ; 0.2%F S
- Display range : -999...3999
- Alarm range : can be setted in whole range
- Maxium switching current/voltage: 3A/220V
- SCR signal : 5V...40μS or 100mA
- Solid state relay signal : 15V ± 3v/30mA
- Main output: reverse control, stepping control and PID control can be
- Alarm output: deviation alarm, absolute value alarm, normally closed switch, normally open switch can be setted
- Power supply: 220V ± 15% 50Hz
- Consume : 4W
- Ambient Temp: 0...50°C
- relative humidity :35% to 85%RH

## SMT-80/90 Series -Digital Display Instrument



1



2

- Ambient temp: 0...50°C
- relative humidity: 35%...85%RH
- Alarm range : can be setted in whole range  
the relay contact capacity of other instruments is AC 220V/3A
- Single-way input, LED display
- Multiple types of signal input available
- Thermal resistance\thermocouple signal resolution switchable: 1°C or 0.1°C
- Upper/lower-limit alarm available with LED alarm lamp indication
- Voltage and current transducing output signal is selectable
- DC24V feed output is available for power distribution for transducer on the site
- Multiple sizes and styles are available for user's choice
- Password lock for parameters setting which would be stored permanently in case of power-off; parameters reset available
- Power supply: 220V ± 15% 50Hz
- Consume : 4W
- Ambient Temp: 0...50°C
- relative humidity :35% to 85%RH

## Other products and related accessories



1

Bimetallic thermometer



2

Paperless recorder



3

Battery powered pressure gauge



4

Outdoor temperature collector



5

Diffusion silicon pressure sensor(1)



6

Diffusion silicon pressure sensor(2)



7

Diffusion silicon pressure sensor(3)



8

Transmitter for 24 VDC regulated power supply



9

Panel flowmeter



10

Electromagnetic flowmeter



11

GPRS data terminal



12

Radar level gauge



13

Hersman junction box



14

Special header hersman junction box



15

2288 meter



16

The buffer tube and Transducer installed base