

Product Overview

Model 5000 Hydrogen Transmitter is an instrument that features simple operation, flexible interface, and truly realizes online hydrogen detection, with a hydrogen measurement range of 0 ~100%vol. The sensor adopts solid-state palladium alloy film technology, which provides absolute hydrogen specificity and is not affected by other flammable gases such as CO, CH compounds. It can even measure in acidic environment such as H2S and Cl2.

Model 5000 Hydrogen Transmitter offers excellent selectivity, no cross-interference, oxygen-free reaction requirement, long service life, reliable long-term stability, and easy installation and maintenance. Its unique technical advantage is also reflected in the sensor's ability to accurately and reliably detect hydrogen in saturated water vapor, with its operation not affected by condensed water. It is widely applicable to various scenarios, including hydrogen production, petrochemicals, pharmaceuticals, semiconductors, on-line monitoring of hydrogen leakage in natural gas blending, on-line monitoring of hydrogen concentration in exhaust gas from fuel cell systems, and hydrogen detection in lithium battery thermal runaway.



Functional Features

- Sealed mental housing with IP67 protection rating.
- High accuracy, excellent stability and long service life.
- Optional pressure compensation function.
- Real-time continuous measurement.

Model 5000 Series					
Model	Measurement Range	CO Limit	H ₂ S Limit	Response Time	Background Gases
5000	0.5%~100%vol	0	0	30s	N ₂
5020	0.4%~5%vol	0	0	60s	N ₂ or Air
5030	0.5%~100%vol	100ppm	1000ppm	60s	N ₂
5040	0.5%~100%vol	20%vol	10%vol	90s	N ₂

Product Performance Parameters

Main Indicators	
Measurement Range (H ₂)	0~ 100%vol
Measurement Accuracy(H ₂) (Absolute Error)	±0.3%vol (0~10%vol)
	±1%vol (10~100%vol)
Response Time (T ₉₀)	< 30s
Gas Medium Temperature	-40 ~ 60
Gas Selectivity	
CO*	5%vol
H ₂ S*	100ppm

Communication and Output	
Analog Output	4 ~ 20 mA
Serial Interface	RS232(Configuration & Diagnosis) , RS485
Communication Protocol	Modbus_RTU
Power Supply	
Operating Voltage	24VDC±10%
Current	0.3A (max)
Power Consumption	≤ 2.5W
Physical Specifications	
Ingress Protection	IP67
Mechanical Interface*	1/2in. MNPT

Product Dimension Drawing

