

Hydrogen Gas Sensor



ZHENGZHOU WINSEN ELECTRONICS TECHNOLOGY CO., LTD.

7 CATEGORIES

200⁺ SERIES

300⁺ DETECTION INDICATORS

Gas Sensors (semiconductor, catalytic, electrochemical, infrared absorption), Gas Flow Sensor, Humidity Sensor, Pressure Sensor, Infrared Detection Sensor, Water Quality Sensor, and Sensing Solutions.



Hydrogen H2 Gas Sensors

MEV-GH01/GH02

- Low consumption
- Wide linear range
- Good anti-interference ability



Sensor type	Electrochemical
Detection range	0-2000ppm; 0-20000ppm
Sensitivity	(0.2-0.8)nA/ppm; ((0.1-0.3)nA/ppm
Resolution	1ppm
Response time (T ₉₀)	<30s
Load resistance (recommended)	(500/1K/2K) Ω
Repeatability	<5% output value
Output linearity	Linear
Temperature range	-10°C to 50°C (common) -40°C to 70°C (occasionally)
Humidity range	15%-90%RH
Lifespan	10 years (standard conditions)

MPV-820

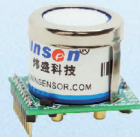
- Good selectivity
- Simple application circuit
- Long life



Sensor type	Flat Surfaced MOS		
Standard encapsulation	TO-5		
Detection range	100-3000ppm		
Standard circuit conditions	Loop voltage	V _C	5.0±0.1V DC
	Heating voltage	V _H	5.0±0.1V DC
	Load resistance	R _L	Adjustable
	Heater consumption	P _H	≤350 mW
	sensitive materials resistance	R _S	0.5KΩ-10 KΩ (in 200ppm H ₂)
Standard condition of testing	Temperature; humidity		20°C±2°C; 65%±5%RH
	Standard test circuit		VC/VH: 5.0±0.1V

ZE610

- Good stability
- High linear output
- Temperature compensated



Sensor type	Electrochemical Sensor Module
Detection range	0-5000ppm
Output data	DAC(0.4-2V standard voltage output corresponding to 0-full scale)
	UART Output (3V-TTL Electrical Level)
Working voltage	5-12V (No voltage reverse connect protection)
Warm up time	≤5 minutes
Response time	≤60s
Resume time	≤60s
Resolution	10ppm
Working temperature	-10°C to 55°C
Working humidity	15%RH-90%RH (No condensation)
Storage temperature	-10°C to 55°C

ZE630-H2

- Low consumption
- High precision
- High temperature resistance



Sensor type	Electrochemical
Detection range	0-1000ppm
Working voltage	5±0.5V DC
Resolution	1ppm
Pre-heating time	3min
Response time (T ₉₀)	<40s
Output	UART/PWM
Working temperature	≤1s
Working environment	-10°C to 50°C (standard) -40°C to 70°C (occasionally)
	15%RH-90%RH (No condensation)
Lifespan	10 years (standard conditions)

GMV-2021B

- All solid state
- Low power consumption
- Long life



Sensor type	MEMS-MOS		
Standard encapsulation	Ceramic		
Detection range	0.1-1000ppm		
Standard circuit conditions	Loop voltage	V _C	≤24V DC
	Heater voltage	V _H	2.5±0.1V AC or DC
	Load resistance	R _L	Adjustable
Sensor character under standard test conditions	Heater consumption	P _H	≤50mW
	Sensitive materials resistance	R _S	1KΩ-30KΩ (in 200ppm H ₂)
	Heater resistance	R _H	80Ω±5Ω (Room temperature)
	Sensitivity	S	R ₀ (in air)/R _S (in 200ppmH ₂)≥5

ZC61

- MEMS process
- Intelligent algorithms
- Anti-electromagnetic interference



Sensor type	MEMS Sensor Module
Detection range	0-40000ppm
Supply voltage(V)	12V (9-16V) DC
Detection accuracy	±10% above1%H ₂
Output signal	CAN
Response time (T ₉₀)	≤3s
Rated current	<25mA
Power consumption	<0.5W
Working temperature	-35 to 85°C
Working humidity	≤95%RH (No condensation)
Storage temperature	-40 to 125°C
Protection grade	IP67

