

4H2-1000 Electrochemical H2 Sensor



Key Features & Benefits

- *Low Power Consumption
- *High Precision
- * High sensitivity
- *Wide Linear Range
- *Excellent Repeatability and Stability

Applications

Energy, Electric Power, Petrochemical, Environmental Protection, Mining, Agriculture, Smart Home, etc.

Technical Specification

MEASUREMENT

| | |
|-------------------------|------------------------------|
| Principle | 3-electrodes electrochemical |
| Range | 0-1000ppm |
| Maximum Overload | 2000ppm |
| Sensitivity | 0.02±0.01 (uA/ppm) |
| Response Time (T90) | <30seconds |
| Baseline Offset (20°C) | 0~3ppm |
| Zero Drift (-20°C-40°C) | <9ppm |
| Repeatability | 2% of signal |
| Output Signal | Linear |
| Long Term Output Drift | <0.5% signal/month |

ELECTRICAL

| | |
|---------------------------|--------------|
| Recommended Load Resistor | 10 Ω |
| Bias Potential | not required |

ENVIRONMENTAL

| | |
|---------------------------|--------------------------|
| Working Temperature Range | -20°C~50°C |
| Working Pressure Range | 90 ~ 110 kPa |
| Working Humidity Range | 10%—90% (not condensing) |
| Storage Temperature Range | 0~20°C |

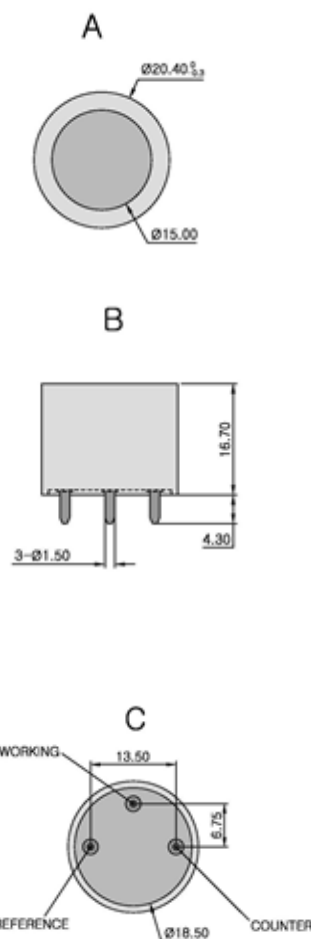
LIFETIME

| | |
|-------------------------|----------------|
| Storage Life | 6months |
| Expected Operating Life | 3 years in air |
| Warranty | 18months |

PHYSICAL CHARACTERISTICS

| | |
|-------------------------|------|
| Weight | 11g |
| Orientation Sensitivity | None |

Product Dimension



Notes: 1 All dimensions in mm

2 All tolerances $\pm 0.15\text{mm}$
unless otherwise stated.

4H2-1000 Electrochemical H2 Sensor**Cross-Sensitivity Data**

- Notes:** 1. All performance data is based on condition at 20°C, 50%RH & 1013mbar. For sensor performance data under other conditions, please contact us.
2. Connection should be made via PCB sockets only. Soldering to the pins will seriously damage the sensor

| Gas | Concentration Used (ppm) | 4H2-1000 (ppm H2) |
|-----|--------------------------|-------------------|
| CO | 100 | 40 |

Precautions:

- 1 .The sensor should be prevented from organic solvents or corrosive gases
- 2 .The sensor should not be stored in dusty, dirty areas and anaerobic environment
- 3 .The sensor must not be exposed to very high concentration of the analyte permanently
- 4 .Excessive shock or vibration should be prevented to avoid internal damage
- 5 .The pins should not be broken or bent
- 6 .The working and reference electrodes should be in short-circuit condition in storage

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