

Solid-state HYDROGEN sensor for range 1-1000 ppm

Model H2.S.1.1000.XXXX

Novel solid-state Hydrogen gas sensors are dedicated for continuous measurement of small concentrations of hydrogen in various media such as air, methane, vacuum, hydrocarbon gases, transformer oil, inert gases, etc. in the range of 1-1000 ppm by gas detectors, gas analyzers, DGA (Dissolved Gas Analysis) systems and are based on the Metal-Insulator-Semiconductor (MIS) multilayer wafers manufactured by help of the Pulse Laser Deposition technology.

Dedicated for OEM manufacturers of gas detectors and analyzers.

The core advantages of solid-state Hydrogen sensors:

- high sensitivity
 - long-term stability
 - long service life (10+ years)
 - long shelf life (7+ years)
 - selectivity to H₂
 - ability of stable operation in conditions of vibration, shock, pressurized media
 - very low rate of cross sensitivity to HC, H₂S*, CO, CO₂, SO₂, NO_x*
 - operation in the conditions of low temperature, high humidity, high temperature
 - possibility to design the sensing devices with the function of automatic monitoring of the performance and tuning
- * follow the manufacturer's technical guidance



- Measured gas: HYDROGEN (H₂)
- Measured media: air, inert gases, methane, hydrocarbon gases, transformer oil, vacuum.
- Measurement range: 1 – 1000 ppm
- Error: ± 5 ppm H₂
- Operating temperature: -40°C _ +120°C
- Medium pressure: max. 10 Bar
- Relative humidity during operation: max. 98% with condensation
- Tested on vibration: 15g 7 ms.2000 impacts, 10g 7 ms.8800 impacts
- Response time: (T₉₀) <60 s (100 ppm H₂)
- Recovery time: (T₁₀) <150s
- Calibration interval: 360 days.
- Expected life time: 10+ years
- Package: TO-8