

HY-OPTIMA™ 750 In-Line Process Hydrogen Monitor

- Corrosion Resistant
- CO Tolerance and Enhanced H2S Tolerance

Description

H2scan's Series 700 in-line hydrogen-specific process monitors are designed for ease of use, interface flexibility and true process control. The HY-OPTIMA™ 750 is a corrosion resistant, solid state sensor configured to operate in harsh background gas streams similar to the tolerance levels of the HY-OPTIMA™ 740 in up to 95% relative humidity and temperatures up to 100°C. The HY-OPTIMA™ 750 is ideal for process gas production and applications with corrosive environments where real time measurements of hydrogen can increase process plant efficiencies, improve diagnostics and enhance maintenance management translating into higher profitability.

Performance

Hydrogen Sensitivity Range:
0.5% to 100% hydrogen by volume at 1 ATM
Typical Response Time: T90 less than 30 sec
Ingress Protection: IP64 capable
Calibration Interval: 90 days
Product Life Expectancy: 10 years
Accuracy: $\pm (0.03 \times \text{indication} + 0.2)$ percent hydrogen by volume

Interface Options

Input Voltage Range: 8 VDC to 13 VDC
Input Current: 0.5 A
Analog Outputs:
Output Voltages - OR - Output Currents

- 0 VDC to 5 VDC
- 1 VDC to 5 VDC
- 0 VDC to 4 VDC
- 0.5 VDC to 4.5 VDC
- User-specific VDC range
- 4 mA to 20 mA
- 0 mA to 20 mA
- User-specific mA range

Serial Communication Options: RS232 or RS422
Relay Contacts: Two programmable 60 VDC / 1 A SPDT relays with both normally open (N.O.) and normally closed (N.C.) contacts

Certification:



Operating Conditions

Process Gas Tolerance:
Corrosion resistant
CO tolerance < 100 ppm
H2S tolerance < 1000 ppm
Operating Humidity: 0% to 95% RH
Flow Rate: 0.1 slpm to 50 slpm
Pressure: 0 to 7 bar gauge, 0 to 100 psi gauge
Process Gas Temperature Range: -20°C to 100°C
Operating Temperature Range: -20°C to 40°C
Storage Temperature Range: -40°C to 50°C
Calibration Background Gas: Nitrogen

Adapter Fittings

½ in. MNPT thread
½ in. FNPT thread
-8 SAE/MS thread size
... and many other industry standards

Dimensions

Total Length: 9.1 in.
Length of Enclosure: 6.7 in.
Length of Tube: 2.4 in.
Width: 3.4 in.
Depth: 1.4 in.

