

## 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	• 4 mA to 20 mA
• 1 VDC to 5 VDC	• 0 mA to 20 mA
• 0 VDC to 4 VDC	• User-specific mA range
• 0.5 VDC to 4.5 VDC	
• User-specific VDC 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:   US LISTED

### 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.

