

## HY-OPTIMA™ 720 In-Line Process Hydrogen Analyzer (Air)

- Calibration in an Oxygen Background

### Description

**H2scan's** Series 700 in-line, real time hydrogen-specific process analyzers are designed for ease of use, interface flexibility and true process control. The HY-OPTIMA™ 720 is a solid state sensor configured to operate in air background gas streams having up to 95% relative humidity and temperatures up to 65°C. The HY-OPTIMA™ 720 is ideal for the monitoring of hydrogen processes where real time measurements of hydrogen can ensure safety in application, increase process efficiencies, improve diagnostics and enhance maintenance management translating into higher profitability.

### Performance

Hydrogen Sensitivity Range:  
*0.4% to 5% hydrogen by volume at 1 ATM*  
*Typical Response Time: T90 of 60 sec maximum*  
 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: 1.0 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

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 65°C*  
 Operating Temperature Range: -20°C to 40°C  
 Storage Temperature Range: -40°C to 50°C  
*Calibration Background Gas: Air*

### 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.

