



ISO9001:2000  
Certified

## Gas Detection Technology

### Model PT205-H2S Hydrogen Sulfide Sensor

#### Features

- Microprocessor based modular design
- Industry standard 4-20mA output
- LED Status Indicator
- 12-24 VDC Power input
- Reverse polarity protection
- Class I, Div 1, Suitable for use in Hazardous Location
- Simple Calibration



#### Description

Model PT205 sensor is designed to detect Hydrogen Sulfide in air and provides an analog output signal. PT205 uses electrochemical cell technology to detect H<sub>2</sub>S in parts per million (ppm).

The complete sensor consists of a stainless steel sensor head assembly, a user connection board and a transmitter board assembly. All of the sensor electronics are enclosed in an explosion proof instrument box. The unit's modular design allows easy maintenance, troubleshooting and high reliability. The low power microprocessor based sensor transmitter provides a 4-20mA analog signal proportional to 0 - 100% of the detection range of the sensor. Also an LED indicator on the transmitter board provides sensor status and fault condition.



## Model PT205 Sensor for H<sub>2</sub>S

### Specifications

#### Sensor Type

Electrochemical

#### Measuring Range

0 to 100 parts per million (ppm)

#### Repeatability

± 2 % Full scale

#### Zero Drift

< 5% per year

#### Response Time

T90 < 30 seconds with 100% FS gas applied

#### Classification

Class I, division 1, Groups B,C & D

#### Operating Temperature

-4°F to +122°F (-20°C to +50°C)

#### Operating Humidity

15% to 90% RH, non-condensing

#### Mechanical Specifications

Length: 7 inches (178 mm)

Width: 5 inches (127 mm)

Height: 4 inches (100 mm)

#### Status Indicators

LED indicator of sensor status and fault condition.

#### Approvals

CSA Approved

CSA Standard C22.2 No 30-M1985 & C22.2 No 142-M1987

#### Input Power

14-28 VDC. 24 VDC nominal

#### Power Consumption

< 1.1 Watt. Typical 45mA @ 24 VDC

#### Analog Output

Linear 4-20mA (300 Ohms max. load)  
< 1.0 mA - Sensor malfunction

#### Cable Requirement

3 wire shielded cable. Max loop resistance of 20 Ohms @ 24 VDC nominal

#### Cable Entry Hub

3/4" NPT Female

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