



# Detcon MODEL TP-524D HYDROGEN SULFIDE SENSOR

ISO 9001:2008  
Certified

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## SPECIFICATIONS

### Sensor Type

Solid State Metal Oxide Semiconductor

### Measurement Range

0-20 ppm, 0-50 ppm, 0-100 ppm  
Hydrogen Sulfide

### Accuracy/Repeatability

±10% of reading or ±2 ppm (greater of)

### Response/Clearing Time

T50 <30 seconds  
T80 <60 seconds

### Operating Temperature Range

-40°F to +167°F; -40°C to +75°C

### Operating Humidity Range

5-100% RH non-condensing

### Outputs

Linear 4-20 mA DC  
HART

### Input Voltage

11.5-28 VDC

### Power Consumption

<2.5 watts @ 24 VDC

### Electrical Classification

Explosion proof  
CSA-US Certified  
Class I, Division 1, Groups B, C, D

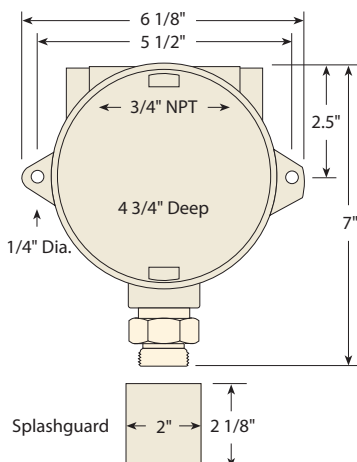
### Performance Approvals

ISA 92.0.01 Part I-1998;  
H2S Performance Requirements

### Sensor Life/Warranty

Sensor: 10 year conditional warranty  
Transmitter: 2 year warranty

## DIMENSIONS

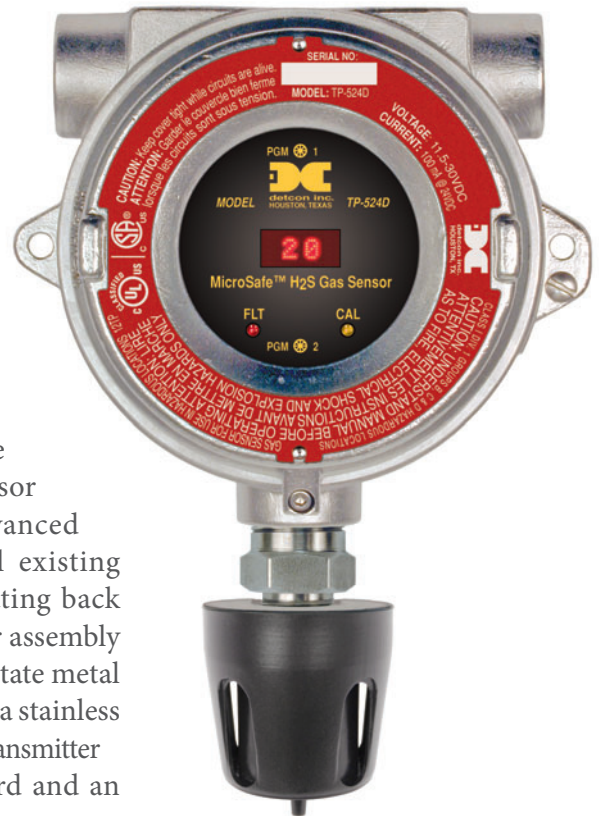


## Solid State MOS

## MicroSafe™ Intelligent Sensor

## DESCRIPTION

Detcon Model TP-524D Hydrogen Sulfide sensors are non-intrusive "Smart" sensors designed to detect and monitor H<sub>2</sub>S in air over the range of 0-100 ppm. The sensor transmitter features an advanced universal design that fits all existing Detcon MOS H<sub>2</sub>S sensors dating back more than 20 years. The sensor assembly consists of a proprietary solid state metal oxide semiconductor sensor in a stainless steel housing, a plug-in control transmitter circuit, a base connector board and an explosion proof enclosure.



## FEATURES

- ▶ Performance Certified to ISA 92.0.01 Part I-1998: Performance Requirements for H<sub>2</sub>S
- ▶ CSA-US approved for Class I, Division 1, Groups B, C, & D
- ▶ Advanced Universal Transmitter design fits all existing Detcon MOS H<sub>2</sub>S Sensors dating back 20 years
- ▶ Simple menu driven calibration - less than 3 minutes
- ▶ LED display and LED indicators for FAULT and CAL status
- ▶ Plug-in field-replaceable transmitter
- ▶ Response Characteristics similar to that of electrochemical sensors: T-50 <30 sec., T-80 <60 sec.
- ▶ VERY wide operating temperature range: -40°C to +75°C
- ▶ 10 year conditional sensor warranty
- ▶ Direct response constant temperature control
- ▶ Withstands exposure to high range concentrations of H<sub>2</sub>S and other acid gases
- ▶ Impervious to high moisture environments in both powered and non-powered mode
- ▶ Extensive Fault diagnostics

## ORDER GUIDE

PN 965-015420-100

Model TP-524D in Aluminum Junction Box

PN 965-01542B-100

Model TP-524D-316SS in Stainless Steel Junction Box

[www.detcon.com](http://www.detcon.com)