



# Detcon Model FP-700

ISO 9001: 2000  
Certified

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## Specifications

### Sensor Type

Matched-pair catalytic bead

### Measurement Range

0-100% LEL (lower explosive limit)

### Accuracy/Repeatability

±3% 0-50% LEL; ±5% 50-100% LEL

### Response/Clearing Time

T50 <10 seconds; T90 <30 seconds

### Zero Drift

<5% per year

### Operating Temperature Range

-40°F to +167°F; -40°C to +75°C

### Operating Humidity Range

0-99% RH non-condensing

### Outputs

Linear 4-20 mA DC  
RS-485 MODBUS-RTU

### Input Voltage

11.5-28 VDC

### Power Consumption

<2 1/2 watts @ 24 VDC

### Electrical Classification

Explosion proof  
Class I, Division 1, Groups B, C, D  
Class I, Zone 1, Group IIB+H2 (ATEX)

### Safety Approvals

cCSAus, ATEX  
SIL2 FMEDA Rating

### Sensor Life/Warranty

Sensor - 2 years; Transmitter 2 Years

### Dimensions

7" High x 2 1/8" Diameter (sensor only)

## Combustible Gas Sensor

### Matched Pair Catalytic Bead

(shown as PN 967-524520-100 in SS junction box)



## Description

Detcon Model FP-700 Combustible Gas sensors are non-intrusive "Smart" sensors designed to detect and monitor Combustible Gas in air over the range of 0-100% LEL (lower explosive limit). The sensor assembly consists of a matched-pair catalytic bead in an electropolished 316SS housing, an encapsulated Intelligent Transmitter Module, and sensor splashguard with integral cal port. Operator interface is via a small handheld magnet. One of the main features is the embedded intuitive software that guides the user through routine calibration and configuration menus using a built-in LED alpha/numeric display.



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

## Features

### Failsafe User-Friendly Interface

- ▶ LED Display (With Antiglare Cover)
- ▶ Full Text Display Method
- ▶ Non-intrusive Interface
- ▶ Auto Zero/Auto Span
- ▶ Pre-emptive Fault Diagnostics

- ▶ Scrolling Full Message/Text Display



(Input Voltage Range, Operating Temperature Range, Detector Signal Amplitude, Output Signal Loop Integrity)

### Environmentally Bulletproof

- ▶ Electropolished 316SS Construction
- ▶ 100% Epoxy Encapsulated Circuitry
- ▶ Bullet-Proof I/O Protection (Over-voltage, Miswiring, EMI/RFI Immunity)
- ▶ Water-Proof, Corrosion-Proof, Vibration-Proof

### Modular and Serviceable

- ▶ Modular Design
- ▶ Plug and Play Components
- ▶ Quick Thread Release (For Sensor Replacement)
- ▶ Integral Calibration Port

### Order Guide Specify junction box options (below)

- ▶ Part Number Description
- ▶ 967-525520-100 FP-700 Sensor Assembly (no junction box)
- ▶ 967-521520-100 FP-700 Sensor Assembly with Aluminum Junction Box
- ▶ 967-524520-100 FP-700 Sensor Assembly with 316 SS Junction Box

### Accessory Modules

- ▶ Remote Control/Alarm Relay Module
- ▶ Hart Integration Module
- ▶ Profibus Integration Module
- ▶ Foundation Fieldbus Integration Module
- ▶ Wireless Integration Module