



Detcon Model PI-700

ISO 9001: 2000

Certified

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Specifications

Sensor Type

Photo Ionization Detector (PID)

Gases Detected

All gases with ionization potential <10.6 eV

Measurement Range

Gas Dependent, ranges as low as 0-10 ppm or as high as 0-5,000ppm (consult Detcon)

Accuracy/Repeatability

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

Response/Clearing Time

T50 <10 seconds; T90 <30 seconds

Span Drift

<10% of reading per 6 months

Operating Temperature Range

-4°F to +122°F; -20°C to +50°C

Operating Humidity Range

0-100% 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 A, B, C, D

Class I, Zone 1, Group IIC (ATEX)

Sensor Life/Warranty

Sensor - 1 Year; Transmitter 2 Years

Dimensions

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

Universal VOC Gas Sensor

Photo Ionization Detector (PID)

(shown as PN 967-P13520-010 in SS junction box)

Description

Detcon Model PI-700 sensors are non-intrusive "Smart" sensors that use photo-ionization detector technology to monitor VOC gases over ranges from 0-10 ppm to 0-5,000 ppm. In the PI-700 sensor design, Detcon has successfully converted the sensitive laboratory style PID technology into a rugged, environmentally insensitive, and long-life industrial gas sensor. The sensor assembly consists of plug-in replaceable miniature PID sensor 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.



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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-P15520-010	PI-700-VOC Sensor Assembly (no junction box)
▶ 967-P11520-010	PI-700-VOC Sensor Assembly with Aluminum Junction Box
▶ 967-P14520-010	PI-700-VOC Sensor Assembly with 316 SS Junction Box
▶ 967-P25520-01K	PI-701-VOC Sensor Assembly (no junction box)
▶ 967-P21520-01K	PI-701-VOC Sensor Assembly with Aluminum Junction Box
▶ 967-P24520-01K	PI-701-VOC 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