



Detcon Model IR-700-CH

ISO 9001: 2000
Certified

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Specifications

- Sensor Type**
Non-dispersive Infrared Optical (NDIR)
- Measurement Range**
0-100% LEL (lower explosive limit)
- Accuracy**
±3% 0-50% LEL; ±5% 50-100% LEL
- Repeatability**
±2% LEL
- Linearity**
±2% LEL
- Response Time**
T90 <5 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 - 5 Year Pro-rated; Transmitter 2 Years
- Dimensions**
7" High x 2 1/8" Diameter (sensor only)

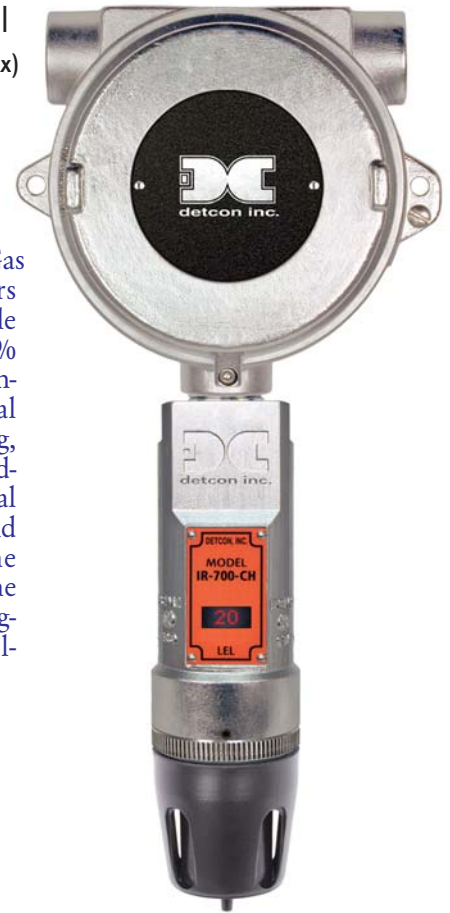
Combustible Gas Sensor

Non-dispersive Infrared Optical
(shown as PN 967-214520-100 in SS junction box)



Description

Detcon Model IR-700-C H Combustible Gas sensors are non-intrusive "Smart" sensors designed to detect and monitor Combustible Hydrocarbons in air over the range of 0-100% LEL (lower explosive limit). The sensor assembly consists of a miniature infrared optical 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.



Gases Detected

- | | |
|---------|-------------------|
| Methane | Hexane |
| Ethane | Ethylene |
| Propane | Gasoline Vapor |
| Butane | Diesel Fuel Vapor |
| Pentane | Jet Fuel Vapor |

For other gases consult the factory.

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
- ▶ 967-215520-100 IR-700-CH Sensor Assembly (no junction box)
- ▶ 967-211520-100 IR-700-CH Sensor Assembly with Aluminum Junction Box
- ▶ 967-214520-100 IR-700-CH 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