



Detcon Model IR-700-CH

ISO 9001
Certified

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Specifications

- Sensor Type**
Non-dispersive Infrared Optical (NDIR)
- 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 (NRTL)
Class I, Zone 1, Group IIC (ATEX)
- Safety Approvals (Pending)**
CSA/NRTL (US OSHA Certified); ATEX
- Sensor Life/Warranty**
Sensor - 5 Year Pro-rated; Transmitter 2 Years
- Dimensions**
7" High x 2 1/8" Diameter

Combustible Gas Sensor

Non-dispersive Infrared Optical
(order by part number 967-215520-100)

Description

Detcon Model IR-700-CH 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 epoxy-encapsulated Intelligent Transmitter Module, and sensor splashguard. 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 (Designed to IEC 61511 and 61508 Functional Safety Standards as a SIL2 Stand-alone Component)

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
- ▶ Limited Spare Parts (Universal Design Concept)
- ▶ Quick Thread Release (For Sensor Replacement)
- ▶ Integral Calibration Port

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)