



Detcon Model DM-700-NO2

ISO 9001: 2000
Certified

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Specifications

Sensor Type

Electrochemical Fuel Cell

Measurement Range

0-10 ppm, Other ranges available

Accuracy/Repeatability

±2% FS

Response/Clearing Time

T90 <40 seconds

Span Drift

<2% signal loss per month

Operating Temperature Range

-20°C to +50°C; -4°F to +122°F

Operating Humidity Range

15-90% 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 A, B, C, D
Class I, Zone 1, Group IIC (ATEX)

Safety Approvals

cCSAus, ATEX
SIL1 FMEDA Rating

Sensor Life/Warranty

Sensor - 2 years; Transmitter 2 Years

Dimensions

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

Nitrogen Dioxide Sensor

Electrochemical Fuel Cell

(shown as PN 967-646494-010 in SS junction box)



Description

Detcon Model DM-700-NO2 Nitrogen Dioxide sensors are non-intrusive "Smart" sensors designed to detect and monitor NO2 in air over the range of 0-10 ppm. The sensor assembly is constructed of electropolished 316SS and consists of two parts – an encapsulated universal Intelligent Transmitter Module (ITM), and a plug-in electrochemical cell with intelligent sensor interface. The plug-in intelligent sensor automatically identifies itself to the ITM and allows for seamless field interchangeability. 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. Included is a splashguard with integral cal port.



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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 |
|------------------|---|
| ▶ 967-646490-010 | DM-700-NO2 Sensor Assembly (no junction box) |
| ▶ 967-646491-010 | DM-700-NO2 Sensor Assembly with Aluminum Junction Box |
| ▶ 967-646494-010 | DM-700-NO2 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