



Detcon Model DM-700-02

ISO 9001: 2000
Certified

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Specifications

- Sensor Type**
Galvanic metal air battery
- Measurement Range**
0-25% Oxygen
- Accuracy/Repeatability**
±1% FS
- Response/Clearing Time**
T90 <= 10 seconds
- Span Drift**
<5% of signal per year (in first two years)
- Operating Temperature Range**
-4°F to +122°F; -20°C to +50°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 A, B, C, D
Class I, Zone 1, Group IIC (ATEX)
- Safety Approvals**
cCSAus, ATEX
SIL1 FMEDA Rating
- Sensor Life/Warranty**
Sensor - 2 years (2 years expected life); Transmitter 2 Years
- Dimensions**
7" High x 2 1/8" Diameter (sensor only)

Oxygen Sensor

Electrochemical Fuel Cell

(shown as PN 967-344520-025 in SS junction box)



Description

Detcon Model DM-700-O2 Oxygen sensors are non-intrusive "Smart" sensors designed to detect and monitor Oxygen in air over the range of 0-25% by volume. The sensor assembly consists of an electrochemical 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
(Input Voltage Range, Operating Temperature Range, Detector Signal Amplitude, Output Signal Loop Integrity)

▶ Scrolling Full Message/Text Display



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
- ▶ 967-345520-025 DM-700-02 Sensor Assembly (no junction box)
- ▶ 967-341520-025 DM-700-02 Sensor Assembly with Aluminum Junction Box
- ▶ 967-344520-025 DM-700-02 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