GAS DETECTION SENSORS •

INTEGRATED CONTROL SYSTEMS

SMARTWIRELESS®

INTEGRATED CONTROL SYSTEMS

PIPELINE ANALYZERS

Description

Detcon Model X40 is a low power alarm and control system designed to monitor multiple gas detection sensors and/or a wide range of other field devices. The versatile control system is designed to receive and supervise inputs using either 4-20mA DC or Serial RS-485 Modbus™ and is available in two packages: Model X40-8 and Model X40-32. Both packages function as a ModbusTM Master and can be customized and expanded based on individual application needs using Detcon's stackable din-rail mounted I/O modules. All I/O modules are individually addressable and operate on 11.5-30VDC. The X40-8 provides power for up to eight field devices and can house up to six 4-channel I/O modules. The X40-32 provides power for up to 32 field devices and can house up to 12 4-channel I/O modules. Detcon I/O modules available for use with the Model X40 include a 4-channel 4-20mA input module (DA-4), a 4-alarm relay output module (RL-4), a 4-channel 4-20mA output module (AO-4), and a 4-relay contact input module (DI-4). Detcon modules can be mounted within the main system enclosure or installed remotely to simplify field wiring.

The Model X40 is completely field programmable using a small handheld magnet and offers advanced technology with intuitive, embedded intelligence. The control system displays real time readings and field device status on a backlit LCD screen. During normal operation the screen displays the alarm status and current reading (i.e., channel number, gas type, and gas concentration) for up to 8 field devices simultaneously. The display is sequential and during normal operation it auto cycles through each of the active channel screens.

Among the system's unique features is a wireless option that can be used with Detcon's RXT-320 SmartWireless® transceivers. Enclosure options include: NEMA 4X, NEMA 1 panel mount, and NEMA 7.

Features

- ▶ 8 to 32 Channel Capacity
- Backlit LCD Screen Display
- Analog or RS-485 Input Options
- ► Easy Intuitive Field Configuration
- Wired or Distributed I/O
- Extensive Event Data Logging
- SmartWireless® Capable

Applications

- ► Oil and Gas Drilling Rigs
- Oil and Gas Production Sites
- Offshore Production Platforms
- ▶ Wastewater Treatment Plants
- ► Food and Beverage Processing
- ▶ Pulp and Paper Mills
- Refining and Petrochemical

Model X40-8-N4X



Model X40-N7



Model X40-N1P



R041813

System Specifications

System Capacity

Model X40-32-N1P: Up to 32 field devices Model X40-8-N4X: Up to 8 field devices Model X40-32-N4X: Up to 32 field devices Model X40-32-N7: Up to 32 field devices (analog or serial)

Indicators:

1 1/8" by 5 3/4" backlit LCD Alarm status LEDs

Display Accuracy

±1% of full scale value

Input Options:

Analog 4-20 mA DC RS-485 Modbus™ RTU Contact closure

Output Options

4-20 mA DC RS-485 Modbus™ Relay Contacts

Safety Approvals

CE Marking (Models X40-N4X & X40-SS)

Warranty

One Year

Environmental Specifications

Operating Temperature Range

-4°F to +158°F, -20°C to +70°C

Storage Temperature Range

-40°F to +185°F, -40°C to +85°C

Operating Humidity Range

0-99% RH non-condensing

Specifications subject to change without notice

Mechanical Specifications

Dimensions

Model X40-32-N1P: 10.5"W x 8"H x 12"D Model X40-8-N4X: 12"W x 14"H x 7.75"D Model X40-32-N4X: 16"W x 17.85"H x 9.5"D Model X40-32-N7: 11"W x 9.15"H x 2.75"D

Weight

Model X40-32-N1P: 10 lbs Model X40-8-N4X: 10 lbs Model X40-32-N4X: 20 lbs Model X40-32-N7: 10 lbs

Electrical Specifications

Power Input

115-230 VAC* or 11.5-30 VDC *Option for Model X40-32-N7

Power Consumption

< 0.25 Watt

(I/O module power consumption not included) (Field device power consumption not included)

Electrical Classification

Model X40-32-N1P: NEMA 1 Panel Mount

Model X40-8-N4X: NEMA 4X Corrosion resistant weatherproof Model X40-32-N4X: NEMA 4X Corrosion resistant weatherproof

Model X40-32-N7: NEMA 7 Class I; Division 1, Group C, D

Order Guide

PN 95P-X32000-000 Model X40-32-N1P, General purpose panel mount hardware assembly 110/220 VAC, 24 VDC power supply (up to 32 active channels).

PN 954-X08000-000 Model X40-8-N4X, Wall mount ABS weatherproof enclosure 110/220 VAC, 24 VDC power supply (up to 8 active channels).

PN 954-X32000-000 Model X40-32-N4X, Wall mount ABS weatherproof enclosure 110/220 VAC, 24 VDC power supply (up to 32 active channels).

PN 957-X32000-000 Model X40-32-N7, Div 1 weatherproof enclosure 24 VDC power* for use in distributed I/O installations only (up to 32 active channels).

*110/220 VAC, 24 VDC power supply optional

*Addressable I/O modules are sold separately.

Houston Odessa Shanghai Dammam Del Carmen



Tel: 713-559-9200
Toll Free: 888-367-4286
Fax: 281-292-2860
Email: sales@detcon.com
Web: www.detcon.com

ISO 9001: 2008 Certified