



# Model X40

Integrated Alarm & Control System

GAS DETECTION SENSORS ■ INTEGRATED CONTROL SYSTEMS ■ SMARTWIRELESS® ■ PIPELINE ANALYZERS ■ ALARMS

## 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 Modbus™ 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

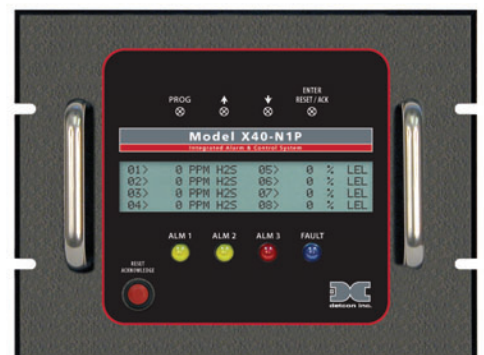
Model X40-N4X



Model X40-N7



Model X40-N1P



## 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

### 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

## 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.

## 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 8.75"D  
Model X40-32-N4X: 16"W x 17.85"H x 8.75"D  
Model X40-32-N7: 11"W x 9.15"H x 2.75"D

### Weight

Model X40-32-N1P: tbd  
Model X40-8-N4X: 10 lbs  
Model X40-32-N4X: tbd  
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

Houston



Odessa



Shanghai



Dammam



Del Carmen



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