



Detcon Model 1600

Multi-channel Microprocessor-Based Gas Alarm Control Panel

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Specifications

Capacity

User Configurable:
up to 16 analog or serial inputs

Inputs

Analog 4-20 mA
Contact Closure
RS-485 Modbus™ RTU

Outputs

User Configurable:
4-20 mA outputs
Form "C" Relay Contacts
Standard: RS-232 or RS-485

Input Voltage

110/220 VAC or 11.5-28 VDC

Power Consumption

Base 1600 Controller: 6 Watts
Total Power dependent on:
Number of I/O Modules
Number of Gas Sensors
Type of sensor inputs

Display

Backlit LCD
Touch-screen

Dimensions

1600-N4X: 16"W x 18"H x 9"D
1600-N1R: 19"W x 7"H x 12"D

Warranty

One Year

Description

Detcon Model 1600 is a "user-configurable" multi-channel gas alarm control system. System capacity is 16 active channels. It can receive and supervise 4-20 milliamp DC inputs, contact closure type inputs, or it can be configured to poll up to 16 serial devices via RS-485 Modbus RTU.

The Model 1600 controller features a modular design that allows the user to customize their selection of stand-alone input and output modules. I/O modules are addressable. Four standard I/O functions are available; a 4-channel 4-20 mA input module, a 4-channel contact closure input module, a 4-alarm relay output module, and 4-channel 4-20 mA output module.

Modules are din-rail mounted and stackable allowing for seamless system expansion. These addressable I/O modules may be housed internal to the main system enclosure or they may be packaged for remote mounting in a separate enclosure suitable for the area classification in which they will be installed. The remote mounting option can in some cases significantly reduce wiring and installation cost.

The status of each active input is displayed on a backlit LCD Touch Screen that also serves as a user interface. Typical input status indication includes channel number, tag name, gas type, concentration, and alarm status. Each input can be configured for up to 3 alarm levels. A fourth alarm is based on fault detection functions integral to the system. Each system application can include either common or discreet alarm relays or a combination of both. Relays can also be configured as zone/voting relays using embedded alarm logic programming. RS-485 or RS-232 serial output is provided for communication with PLC's, PC's, DCS's, and remote screens.

The control system can be powered by 110/220 VAC or 11.5-30 VDC. The Model 1600 is available in 2 packages: NEMA 1 rack mount and NEMA 4X weatherproof. Detcon's full range of gas sensors, which are purchased separately, can be mixed and matched to create a gas detection system consisting of toxic gas, combustible gas, or oxygen deficiency. A wide range of field devices such as liquid level, temperature, pressure, flow etc. can also be configured for input to the control system. Features include one-touch Alarm Inhibit, Alarm Reset, and Alarm Silence (Acknowledge) functions.

The Model 1600 controller provides for a unique combination of user programming flexibility and customizable expansion capability, in a low-cost and simple-to-operate package.



1600-N1R



1600-N4X

Order Guide

954-161610-000 Model 1600-N4X (Nema 4X)
95R-161610-000 Model 1600-N1R (Nema 1)
976-041400-000 Model DA-4 mA DC input module
975-041402-000 Model DI-4 dry contact input module
975-041401-000 Model AO-4 mA DC output module
975-041400-000 Model RL-4 relay module

Features

- ☞ 1 through 16 channel input capacity
- ☞ 4-20 mA, contact closure, or Modbus RTU serial input capability
- ☞ Readily field expandable
- ☞ I/O modules can be located remotely from controller
- ☞ Large LCD with Touch-screen User Interface
- ☞ RS-232 or RS-485 serial output to other monitoring devices
- ☞ Alarm Inhibit, Alarm Acknowledge, and Alarm Reset Functions
- ☞ Internal Logging of all Alarm/Fault conditions
- ☞ Lightning & overvoltage protection standard

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