

# Model IN042

Four-Zone Input Module



General Monitors



## Applications

- Refineries
- Drilling platforms and rigs
- Fuel loading facilities
- Compressor stations
- LNG/LPG processing and storage facilities
- Chemical plants
- Gas collection and distribution facilities
- Gas and oil production platforms
- Aircraft hangars

## Features & Benefits

- RS-485 serial communications allows remote setup and interrogation via the General Monitors CC02A communications module
- Four independent detector zones provide more available inputs
- LED status indication per zone provides visual indication of fault and status
- Open collector alarm and fault outputs per zone for multi-function use
- Operation modes for increased operator flexibility

## Description

The General Monitors IN042 is a four-zone input module that has been designed for use with 3-wire field devices such as smoke or heat detectors, pull switches and manual callpoints. It is designed to monitor these devices and provide both status indication and fault/alarm outputs for each zone.

Features of the IN042 are LED indications of zone status, as well as fault and alarm open collector outputs for each zone. Each zone also has its own reset/inhibit switch for resetting latched alarms and inhibiting the zone from alarm output. The IN042 contains microprocessor-based electronics for advanced fault checking and operation. Selecting options is accomplished through DIP switch selections.

Each module has RS-485 serial communications providing an interface with the General Monitors CC02A Modbus communications module. Fault and alarm status, as well as setup options, can be configured via the CC02A module.

The IN042 is part of the Zero Two Series Gas and Fire Detection System, a flexible solution for various combustible, toxic gas and fire detection applications. All Zero Two Series system cards are compatible and can be intermixed within the same rack if required. Zero Two Series Rack includes options of 4, 8 or 16 channels and provides a bus of common terminals to each channel.



The Safety Company

*Because every life has a purpose...*

System Specifications	
APPLICATION	Smoke or heat detection, pull switches, and call points
DETECTOR TYPE	Ionized chamber or optical smoke, heat detectors. Normally open or normally closed pull switches and call points
BARRIER TYPE	Galvanic isolation or dual channel passive
FRONT PANEL INDICATORS	A1 - warning A2 - alarm CAL - calibration/check READY - normal operation FAULT - malfunction SETUP - user options/check DISPLAY - 3 x 7 segment
FRONT PANEL SWITCHES	Reset - reset alarms (each zone) Inhibit - Inhibit alarms (each zone)
TEST FEATURES	Power on - electronic integrity Card - functionality and alarm ramp LED - integrity of LEDs and display
MODES	Call point, detector, inhibit outputs
DEVICES	500 call points max. per zone Detector max. per zone varies
ELECTRICAL CLASSIFICATION	General purpose, non-hazardous areas
WARRANTY	2 years
APPROVALS	CSA, CE Marking, GOST
Environmental Specifications	
OPERATING TEMPERATURE RANGE	0°F to +150°F (-18°C to +66°C)
STORAGE TEMPERATURE RANGE	-40°F to +150°F (-40°C to +66°C)
HUMIDITY	5% to 100% RH, non-condensing
EMC SUSCEPTIBILITY	10V/m max.

Electrical Specifications	
INPUT POWER	24 VDC nominal (20 to 35 VDC) 1V p-p (supply noise & ripple)
INPUT CURRENT	0.5A max. @ +18 VDC 0.3A max. @ +35 VDC
INPUT LIMITS	Call point, NO: series resistance 390 to 820 ohms (detector mode) Call point, NO: series zener diode 5.6V to 10V ±5%, 1/2W (detector mode)
OUTPUT VOLTAGE	16 to 24 VDC (with 5.6K, EOL resistor) 2 VDC (reset voltage) 27 VDC (open circuit)
OUTPUT CURRENT	2mA DC (not including EOL resistor)
OPEN COLLECTOR RATING	100mA@ 30 VDC maximum
CABLE PARAMETERS	10 ohms max. field loop
Mechanical Specifications	
LENGTH	9.9 inches (251mm)
HEIGHT	6.8 inches (173 mm)
WIDTH	1.0 inch (25 mm)
WEIGHT	11.2 ounces (318 grams)
STANDARD CONFIGURATION	IN042-1-1-1-1-2-4-1



Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products. Specifications subject to change without notice.



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