



GENERAL MONITORS
Protection for life.

MODEL 4802A

Single-Channel Combustible Gas Control Module



Features

- RS-485 Serial Communications
- Digital Display
- LED Status Indication
- Relay, Open Collector Alarm & Fault Outputs
- User Setup, Setup Check Modes
- Live Insertable into Rack
- Password Option
- Automatic, no adjustments calibration

Benefits

- Remote set-up and interrogation via General Monitors' Model CC02A Communications module
- Provides visual indication of alarm status and setup cues
- Provides visual indication of fault and status
- Multiple outputs for multi-function use
- Configuration easy to setup or change
- Ease of maintenance
- Tamper-proof operation
- Eliminates calibration errors

Description

The General Monitors Model 4802A is a single-channel Combustible Gas Control Module that has been designed for use with General Monitors' Catalytic Bead Sensors. It is designed to monitor combustible gases and vapors within the lower explosive limit (LEL) and provide status indication and alarm outputs.

Microprocessor-based electronics allow all options to be user selectable through front panel interface (mode/select switch and digital display). A digital display on the 4802A indicates gas concentration, fault codes, calibration cues and set-up options. Other features of the 4802A are LED indications of status, as well as both open collector and relay outputs for fault, low alarm and high alarm.

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

The 4802A is part of the Zero Two Series Gas and Fire Detection System which is a flexible solution

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

Applications

- Refineries
- Drilling Platforms and Rigs
- Gas Collection and Distribution Facilities
- Gas and Oil Production Platforms
- LPG/LNG Processing and Storage
- Solvent Vapors
- Chemical Plants
- Wastewater Treatment Facilities



MODEL 4802A

System Specifications

Sensor Type:	Continuous diffusion, low temperature catalytic bead
Sensor Life:	3 to 5 years typical
Accuracy:	±3% LEL up to 50% LEL ±5% LEL > 51% LEL
Zero Drift:	Less than 5% of full scale per year
Response Time:	T50 < 10 Sec. T90 < 30 sec. with 100% LEL methane applied (screen)
Measuring Ranges:	0-100% LEL
Front Panel Indicators:	A1 - Warning A2 - Alarm CAL - Calibration/Check READY - Normal Operation FAULT - Malfunction SETUP - User Options/Check DISPLAY - 2x7 Segment
Test Features:	Power on - Electronic Integrity Card - Functionality & Alarm Ramp LED - Integrity of LED's & Display
Modes:	Setup, Setup Check & Inhibit outputs
Password:	Prevents unauthorized alteration of setup parameters (can be disabled)
Classification:	<i>4802A:</i> General purpose, non-hazardous areas <i>Sensor:</i> Explosion-proof
Warranty:	Two years
Approvals:	CSA, CE Marking, GOST

Environmental Specifications

Operating Temperature Range:	0°F to 150°F (-18°C to 66°C)
Catalytic Bead Sensors:	
CSA	<i>Std. Sensor:</i> -65°F to 200°F (-55°C to 93°C) <i>Hi Temp Sensor:</i> to 400°F (200°C)
ATEX	<i>Std. Sensor:</i> -40°F to 248°F (-40°C to 120°C) <i>Hi Temp Sensor:</i> to 356°F (180°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.

Mechanical Specifications

Length:	9.9 inches (251 mm)
Height:	6.8 inches (173 mm)
Width:	1.0 inch (25 mm)
Weight:	11.2 ounces (318 grams)

Electrical Specifications

Power:	20-35 VDC @ 300 mA max., including Smart Sensor
Relay Ratings: <i>(Optional)</i>	4A @ 250 VAC / 30V RMS/42.4 peak, 3A @ 30 VDC, resistive max. A1, A2 - DPDT Fault - SPDT
Analog Signal: <i>(Optional)</i>	0-20mA (500 ohms max. load) Malfunction - 0 mA Calib/Setup/Check - .5 mA Zero Reading - 4 mA±0.2 mA 0-100% LEL - 4-20 mA Over-range - 20-22 mA
Open Collector Ratings:	100 mA @ 35 VDC max. A1, A2, Fault, LA1, LA2, CAL, FUA, UA
Cable Requirements:	3 wire shielded cable. Max. allowable distance between sensor & 4802A with one-way resistance of 20 ohms @ 24 VDC nominal: 14 AWG - 7600 ft. (2320 m) Max. allowable distance for analog output (500 ohms loop resistance between AO+ and AO-): 14 AWG - 9000 ft. (2740 m)
Standard Configuration:	4802A-4-1-00-1-1-0-1 Relays, 4-20 mA, latch alarm, non-latch warn, de-energized, 3 sec. ramp time, relays inhibited

Specifications subject to change without notice.

Represented by:

Publication #: DS-4802A-E0908

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