GENERAL MONITORS

Protection for life.

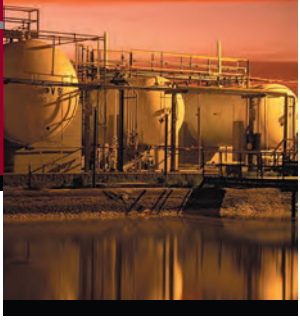
Product Guide





Total Solution Provider for Gas and Flame Detection

Protection for Life



People around the globe who work in hazardous environments know they can depend on General Monitors. Our mission, “Protection for Life,” represents a continuous commitment to solving workplace safety problems to reduce injury and protect property.

Combining advanced technology with exceptional service, General Monitors sets the standard for total safety solutions. Our Combustible, Ultrasonic, H_2S, and other Toxic Gas Detectors, along with our Flame Detectors and Fire & Gas Systems can be found in the following industries:

- Aerospace
- Agriculture
- Automotive
- Chemical
- Coal Mining
- Electric Power
- Electronics
- Food and Beverage
- Oil and Gas
- Petrochemical
- Pharmaceuticals
- Pulp/Paper
- Textiles
- Transportation
- Warehousing and Distribution
- Water and Waste Treatment

Certifications

To ensure safety, General Monitors' engineers design products to rigorous global standards. Our products are certified to standards that include:

- ATEX
- BRE
- BV Marine
- CE Marking
- CSA
- EN61779-1/-4
- FM
- GOST (Russia)
- IECEx
- ISA
- NEC
- NFPA 72
- SIL
- UL
- ULC
- VNIIPO (Russia)

Quality

The responsibility and commitment for successfully achieving our company mission is demonstrated by our commitment to our ISO9001:2008 Quality Management Program. This program helps to ensure that our objectives for product, process and service quality meet or exceed our internal and external customers' expectations.

Global Facilities

No matter where you are, General Monitors is there ready to help you solve your safety problems. To support our customers worldwide, General Monitors has offices in:

- *Lake Forest, California:* Corporate headquarters with a modern engineering design center, R&D, manufacturing, sales and service.
- *Galway, Ireland*: Campus supports the European Union with an engineering design center, R&D, and manufacturing.
- *Macclesfield, England; Houston, Texas; Singapore; United Arab Emirates:* Sales offices.
- *Ballerup, Denmark:* Gassonic sales facility for ultrasonic gas leak detectors.

Combustible Gas Monitoring

Using proprietary designs, materials and manufacturing techniques, combustible gas detectors from General Monitors feature rapid response and superior accuracy. Our broad product line of combustible gas detectors utilizes either catalytic bead or infrared sensing technology providing a variety of detection choices. They meet a wide range of application requirements in production platforms, fuel loading facilities, compressor stations, oil well logging, gas turbines and more. Our combustible gas detector product line features universal product approvals: CSA, FM, ATEX, IECEx, CE Marking, and/or GOST.

S4000CH / S4100C Intelligent Sensors

- Microprocessor-based transmitter designed for use with our reliable catalytic-bead sensors.
- Remote mounting of sensor increases installation flexibility.
- 3 digit LED display shows gas concentrations in % LEL, fault codes for troubleshooting and calibration prompts.
- 4-20mA output for remote alarm and fault indication.
- Optional HART (S4000CH only) and Modbus communication provides complete status and control capability in the control.

IR400 Infrared Point Detector

- Fail-to-safe operation.
- Reduces maintenance, no routine calibration.
- 4-20 mA output for remote alarm and fault indication.
- Modbus compatibility with two-way addressable communication for status and alarm information.
- Microprocessor-based IR detector that detects combustible gases and vapors within LEL limits.
- Optional HART digital communication signal transmitted on the 4-20 mA analog signal.

IR5500 Open Path Hydrocarbon Gas Monitoring System

- Single Detection Beam technology eliminates drift and false alarms.
- Digital display provides continuous readout of gas concentration and fault codes.
- Continuous optical check for beam blockage and automatic gain signal reduction.
- Microprocessor-based IR open path gas monitoring system detects combustible gases and vapors in both LEL•m and ppm•m ranges.

IR4000S Single Point / IR4000M Multi-Point Gas Monitors

- Three-digit LED displays gas concentrations in % LEL, fault codes for troubleshooting and calibration prompts.
- Explosion-proof enclosure allows installation in hazardous locations.
- Optional 8 Amp relays expands system functions.
- Magnetic interface provides ease of maintenance and accessibility.
- IR4000M can connect up to eight remote IR400 or IR5500 gas detectors.

580A Dual-Channel, 610A Four-Channel Combustible Gas Monitors

- Provide continuous monitoring of combustible gas and vapors in the LEL range.
- Simple calibration process without the need to de-classify the area.
- Relays indicate High, Low, and Malfunction alarms.
- High visibility LED status indicators.

Model	Sensor Type	Local Relays	Channels	Mounting	Power	Open Collector Outputs	Digital Display Per Channel	Event Logging	Selectable Relay Options
S4000CH	Catalytic Bead	Optional	1	Surface or Conduit	24 VDC	No	Yes	Yes	Yes
S4100C	Catalytic Bead	No	1	Surface or Conduit	24 VDC	Yes	Yes	No	No
IR400	Infrared	w/ IR4000	1	Surface	24 VDC	No	No	Yes	No
IR5500	Infrared	Yes	1	Surface	24 VDC	No	Yes	Yes	Yes
580A	Catalytic Bead	Yes	2	Panel or Wall	110 VAC or 24 VDC	No	No	No	Yes
610A	Catalytic Bead	Yes	1 to 4	Panel or Wall	110 VAC or 24 VDC	No	Yes	No	Yes
4802A	Catalytic Bead	Optional	1	Panel or Wall	24 VDC	Yes	Yes	No	Yes

Model	Local Relays	Channels	Mounting	Power	Open Collector Outputs	Digital Display Per Channel	Event Logging	Selectable Relay Options
TA102A	Optional	1	Panel or Wall	24 VDC	Yes	Yes	No	Yes
DC110	Yes	1 to 8	Panel or Wall	24 VDC	Yes	No	No	Yes
MC600	Yes	1 to 6	Wall	110 VAC or 24 VDC	No	Yes	No	Yes
IR4000	Optional	1 to 8	Surface or Conduit	24 VDC	No	Yes	Yes	Yes

DC110 Eight-Channel Readout / Relay Module

- Provide continuous monitoring of combustible gas and vapors in the LEL range.
- Receives outputs from up to eight remotely located sensors and processes them to provide. digital readout of gas concentration at each intelligent sensor location.
- Large digital LED display for easy reading.
- Relays indicate ALARM, WARN, and MALFunction conditions.

TA102A Trip Amplifier & 4802A Control Module

- TA102A interfaces with remote Intelligent Transmitters, providing relays and display in the Control Room.
- 4802A provides continuous monitoring of combustible gas and vapors in the LEL range using a raw sensor.
- Microprocessor-based electronics allow options to be user selectable through front panel interface.
- Digital display indicates gas concentration, fault codes, calibration cues and setup options.
- LED indications of status, open collector and relay outputs for fault, low alarm and high alarm.
- Remote setup and interrogation, via RS-485 serial communications interface, available with CC02A Modbus communications module.

Catalytic-Bead Sensors

- Additional support post protects beads from shock and vibration.
- Large active bead surface area provides large signal-to-noise ratio for stable performance, poison-resistance and long life.
- Precious metals used for all components mounted in Teflon body tolerate corrosive and aggressive environments.
- Glass coated reference bead eliminates drift.

H_2S Gas Monitoring

Hydrogen Sulfide Gas Detectors from General Monitors are among the most advanced in the world. We introduced the first solid-state sensors to offer single-point calibration, which significantly reduces maintenance time and cost. Our long-life metal oxide semiconductor (MOS) sensors are relied upon for their speed of response, high sensitivity, repeatability, robustness and reliability in a wide range of temperature and humidity conditions. They were the first in the industry to meet the ISA-S12.15, Part I standard, and are ideal for oil/gas drilling rigs, refineries, production facilities and other industrial environments where H_2S is present. Our MOS sensors are approved to CSA, and FM requirements, Class I, Div 1, Groups B, C and D areas or ATEX, and GOST; Ex ds IIC T6.

S4000TH/S4100T Intelligent Sensors

- 0-20 ppm, 0-50 ppm, 0-100 ppm detection ranges for broad applications use.
- Microprocessor-based transmitter designed for use with our MOS sensors.
- 3 digit LED display shows gas concentration in ppm, fault codes and calibration prompts.
- Remaining sensor life indicator.
- Sensor can be remote mounted for increased installation flexibility.
- Dual redundant Modbus compatibility with two-way addressable communications for status and alarm information.
- Optional HART digital communication signal transmitted on the 4-20 mA analog signal (S4000TH).

TS4000H Intelligent Sensor

- Integral galvanic isolation permits hot swapping of electrochemical sensors for simple installation.
- Microprocessor-based transmitter designed for use with our 0-20 ppm, 0-50 ppm and 0-100 ppm H_2S electrochemical sensor.
- Sensor can be remote mounted up to 2,000 ft (610m) for installation flexibility.
- One person, non-intrusive calibration method reduces maintenance costs.
- Sensor life indicator reduces downtime by providing an estimate of remaining sensor life.
- 4-20 mA analog output for remote alarm and fault indication.
- Dual redundant Modbus compatibility with two-way addressable communications for status and alarm information.
- Optional HART digital communication signal transmitted on the 4-20 mA analog signal.

2280A Four-Channel Continuous H_2S Gas Monitor

- 0-20 ppm, 0-50 ppm, 0-100 ppm detection ranges for broad applications use.
- Simple calibration process without the need to de-classify the area.
- Relays indicate High, Low, and Malfunction alarms.
- High visibility LED status indicators.

DT210 Readout/Relay Module

- Receives outputs from up to eight remotely located intelligent sensors and processes them to provide digital readout of gas concentration at each sensor location.
- Digital display indicates 0-20 ppm, 0-50 ppm, or 0-99 ppm of the gas being monitored by our H_2S sensors.
- Relays indicate ALARM, WARN, and MALFunction conditions.

Model	Sensor Type	Local Relays	Channels	Mounting	Power	Open Collector Outputs	Digital Display Per Channel	Event Logging	Selectable Relay Options
S4000TH	MOS	Optional	1	Surface or Conduit	24 VDC	No	Yes	Yes	Yes
S4100T	MOS	No	1	Surface	24 VDC	Yes	Yes	No	No
TS4000H	EC	Optional	1	Surface or Conduit	24 VDC	No	Yes	Yes	Yes
2280A	MOS	Yes	1 to 4	Panel or Wall	110 VAC or 24 VDC	No	Yes	No	Yes
2602A	MOS	Optional	1	Panel or Wall	24 VDC	Yes	Yes	No	Yes

Model	Local Relays	Channels	Mounting	Power	Open Collector Outputs	Digital Display Per Channel	Event Logging	Selectable Relay Options
TA202A	Optional	1	Panel or Wall	24 VDC	Yes	Yes	No	Yes
DT210	Yes	1 to 8	Panel or Wall	24 VDC	Yes	No	No	Yes
MC600	Yes	1 to 6	Wall	110 VAC or 24 VDC	No	Yes	No	Yes

2602A Single-Channel Control Module

- Monitors H_2S in ppm levels and provides status indication and alarm outputs.
- Microprocessor-based electronics allow options to be user selectable through front panel interface.
- Digital display indicates gas concentration, fault codes, calibration cues and setup options.
- LED indications of status, open collector and relay outputs for fault, low alarm and high alarm.
- Remote setup and interrogation, via RS-485 serial communications interface, available with CC02A Modbus communications module.

TA202A Single-Channel Trip Amplifier

- Monitors H_2S in ppm levels and provides status indication and alarm outputs for use with our sensors.
- Microprocessor-based electronics allow all options to be user selectable through front panel interface.
- LED indications of status, open collector and relay outputs for fault, low alarm and high alarm.
- Remote setup and interrogation, via RS-485 serial communications interface, available with CC02A Modbus communications module.

H_2S Sensors

- Solid state semiconductor, diffusion, adsorption device.
- Specifically sensitive to H_2S and remains unaffected by high concentrations of other gases; unaffected by over-range or continuous exposure to H_2S.
- High tolerance to ambient temperature variations and extreme humidity.

Toxic Gas Monitoring

Toxic gas detectors from General Monitors are designed with advanced electrochemical and infrared sensing elements for use in hazardous environments where reliability and precision are essential. Our high-performance instruments support a wide range of applications, including wastewater treatment, chemical processing, food and beverage, electric power generation, pulp/paper mills and many more. You can always count on General Monitors to provide unsurpassed protection of people and equipment. Our toxic gas detector product line features universal product approvals: CSA, FM, ATEX, IECEx, CE Marking.

TS4000H Intelligent Toxic Gas Detector

- Integral galvanic isolation permits hot swapping of electrochemical sensors for simple installation.
- Microprocessor-based transmitter designed for use with our electrochemical sensors.
- Sensor can be remote mounted up to 2,000 ft (610 m) for installation flexibility.
- One person, non-intrusive calibration method reduces maintenance costs.
- 4-20 mA analog output for remote alarm and fault indication.
- Optional HART and Modbus user interface provides full status & control capability in the control room.

IR700 Infrared Carbon Dioxide Detector

- Microprocessor-based infrared point detector for CO_2 that continuously monitors at ppm level.
- IR sensor requires no routine calibration, reducing maintenance costs.
- Fail-to-safe operation for continuous service.
- Heated optics avoids condensation and false alarms.
- “Dirty optics” output differentiates cleaning requirement from true fault.

IR4000S-CO_2 Single Point Gas Monitor

- Three-digit LED displays gas concentrations in % LEL, fault codes for troubleshooting and calibration prompts.
- Explosion-proof enclosure with magnetic interface allows installation and calibration in hazardous locations.
- Local interface provides ease of maintenance and accessibility.
- Optional 8 Amp relays expands system functions.

Model	Sensor Type	Gas	Measuring Range	T90 Response Time	Event Logging
TS4000H	Electrochemical	Ammonia	0-50, 0-100 ppm	< 60 sec.	Yes
IR700	Point Infrared	Carbon Dioxide	0-5000 ppm	≤ 15 sec.	Yes
TS4000H	Electrochemical	Carbon Monoxide	0-100 ppm, 0-500 ppm	< 30 sec.	Yes
TS4000H	Electrochemical	Chlorine	0-10, 0-20 ppm	< 60 sec.	Yes
TS4000H	Electrochemical	Chlorine Dioxide	0-3 ppm	< 60 sec.	Yes
TS4000H	Electrochemical	Hydrogen	0-500 ppm	< 30 sec.	Yes
TS4000H	Electrochemical	Hydrogen Chloride	0-20 ppm	< 100 sec.	Yes
TS4000H	Electrochemical	Hydrogen Sulfide	0-20, 0-50, 0-100 ppm	< 45 sec.	Yes
TS4000H	Electrochemical	Nitric Oxide	0-100 ppm	< 10 sec.	Yes
TS4000H	Electrochemical	Nitrogen Dioxide	0-20 ppm	< 30 sec.	Yes
TS4000H	Electrochemical	Oxygen Deficiency	0-25% v/v	< 15 sec.	Yes
TS4000H	Electrochemical	Ozone	0-1 ppm	< 90 sec.	Yes
TS4000H	Electrochemical	Sulfur Dioxide	0-20 ppm, 0-100 ppm	< 10 sec.	Yes

Ultrasonic Gas Leak Detection

Ultrasonic gas leak detection technology detects leaks from pressurized gas systems by sensing the airborne ultrasound produced by the escaping gas. They detect gas leaks at the speed of sound in a detection radius up to 28 meters. Ultrasonic gas leak detectors do not have to wait for the gas to accumulate into a potentially dangerous gas cloud and come into physical contact with the detectors. They are unaffected by conditions such as changing wind directions, gas dilution, and the direction of the gas leak - conditions relevant for most outdoor gas installations. They instantaneously raise an alarm if a leak is detected. The Gassonic ultrasonic gas leak detectors have a worldwide installation track record of more than 4000 units offshore and onshore in the petrochemical industries.

Gassonic Observer-*i*

- Designed with Artificial Neural Network (ANN) technology which distinguishes between real gas leaks and false alarm sources.
- Detects gas leaks from 2 BAR (29 psi) pressure for rapid detection of small leaks.
- Stainless steel AISI 316L housing.
- HART and Modbus user interface provides full status & control capability in the control room.
- Event Logging.
- CSA, FM, ATEX, IECEx certified.

Gassonic Surveyor

- Standard 4-20 mA analog and alarm/fault relay outputs.
- Wide dynamic range (44-104 dB).
- Visual LED indication for various detector functionalities.
- Minimal maintenance and calibration requirements.
- Retrofittable with Gassonic MM0100 installations.
- Intrinsically safe, EEx-i design.
- ATEX and IECEx certified.

Gassonic 1701

- Testing of all the Gassonic detectors on-site.
- Field calibration of the Gassonic Observer and Surveyor.
- ATEX, C-UL US certified.

Gassonic SB100

- Hand-held, rechargeable ultrasonic tester designed to bump test Gassonic detectors.
- Long activation range (up to 18 m).
- Explosion-proof design.
- 5 hour battery life allows for multiple ultrasonic gas leak detectors to be tested before recharging.

Flame Detection

Designed with ultraviolet (UV), UV/infrared (UV/IR) and multi-spectral IR (MSIR) sensing technologies, our Flame Detectors represent the state-of-the-art in flame monitoring. They feature advanced microprocessors, with neural network intelligence available on some models, along with continuous optical path monitoring (COPM), digital frequency analysis (DFA) and flicker discrimination circuitry. They provide the highest levels of protection available with superior false alarm immunity and excellent field-of-view capability. To support applications worldwide, they feature universal approvals: CSA, FM, ATEX, IECEx and/or CE Marking approved.

FL4000H MSIR Flame Detector

- Multi-Spectral Infrared (MSIR) sensor array increases the detection range and field of view.
- Neural Network Technology (NNT) provides superior false alarm immunity.
- Designed to detect typical fires such as alcohol, n-heptane, gasoline, jet fuels and hydrocarbons. Can also see through dense smoke produced by diesels, rubber, plastics and lube oil fires.
- 4-20 mA analog output for remote alarm and fault indication.
- Dual Modbus compatibility with two-way addressable communications for status and alarm information and with optional 8 amp relays (3x).
- Optional HART digital communication signal transmitted on the 4-20 mA analog signal.

FL3100H UV/IR Unitized Flame Detector

- FL3100H UV/IR detector is appropriate for either indoor or outdoor use.
- FL3100H-H_2 specifically detects hydrogen fires, with shorter wavelength of 2.7-3.2 micrometers.
- Three alarm/fault relays and RS-485 output with Modbus RTU protocol for linking up to 128 detectors, 247 units with repeaters.
- Designed to detect unwanted fires and provide alarm outputs directly from detector while maintaining false alarm immunity.
- Explosion-proof housing allows detector information to be processed at the point of detection.
- Provides a stepped output 4-20 mA signal which indicates the detector's status.
- Optional HART digital communication signal transmitted on the 4-20 mA analog signal.

FL3101H UV Unitized Flame Detector

- FL3101H UV-only detector detects in UV spectral range, optimized for speed of response.
- Three alarm/fault relays and RS-485 output with Modbus RTU protocol for linking up to 128 detectors, 247 units with repeaters.
- Designed to detect unwanted fires and provide alarm outputs directly from detector while maintaining false alarm immunity.
- Explosion-proof housing allows detector information to be processed at the point of detection.
- Provides a stepped output 4-20 mA signal which indicates the detector's status.
- Optional HART digital communication signal transmitted on the 4-20 mA analog signal.

FL3110 (UV/IR)/FL3111 (UV) Flame Detectors

- FL3110 UV/IR detector is appropriate for either indoor or outdoor use.
- FL3111 UV-only detector detects in UV spectral range, optimized for speed of response.
- FL3111HT ultraviolet (UV) flame detector operates in high temperatures up to 125°C.
- Three alarm/fault relays or RS-485 output with Modbus RTU protocol for linking up to 128 detectors, 247 units with repeaters.
- Explosion-proof housing allows detector information to be processed at the point of detection.
- Provides a stepped output 4-20 mA signal which indicates the detector's status.
- Terminal enclosure certified EExe.

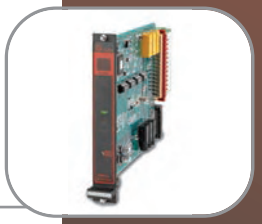
Model	Wavelength	Field of View	Typical Response Time	Event Logging
FL4000H	2 - 5 microns	100º @ 50 ft., 90º @ 210 ft.	< 10 sec. @ 50 ft.	Yes
FL3100H	185 to 260 nm (UV) 4.35 microns (IR)	120º horizontal, 115º vertical	< 3 sec. @ 50 ft.	Yes
FL3101H	185 to 260 nm	140º horizontal, 135º vertical	< 1 sec. @ 50 ft.	Yes
FL3100H-H_2	185 to 260 nm (UV), 2.7-3.2 microns (IR)	120° horizontal, 115° vertical	< 3 sec. @ 50 ft.	Yes
FL3110	185 to 260 nm, 4.35 microns (IR)	120º horizontal, 115º vertical	< 3 sec. @ 50 ft.	No
FL3111	185 to 260 nm	120º horizontal, 115º vertical	< 1 sec. @ 50 ft.	No
FL3112	4.35 microns	120º maximum	< 2 sec. @ 50 ft.	No

FL3112 Digital Frequency Infrared Flame Detector

- Detects radiation from the infrared spectral region of a flame.
- Three alarm/fault relays or RS-485 output with Modbus RTU protocol for linking up to 128 detectors, 247 units with repeaters.
- Designed to detect unwanted fires and provide alarm outputs directly from detector while maintaining false alarm immunity.
- Explosion-proof housing allows detector information to be processed at the point of detection.
- Provides a stepped output 4-20 mA signal which indicates the detector's status.
- Terminal enclosure certified EExe.

TA402A Single-Channel Trip Amplifier

- Zero Two Series panel card with relays for use with our Flame Detectors.
- Microprocessor-based electronics allow all options to be user selectable through front panel interface.
- LED indications of status, open collector and relay outputs for fault, low alarm and high alarm.
- Remote setup and interrogation, via RS-485 serial communications interface, available with CC02A Modbus communications module.



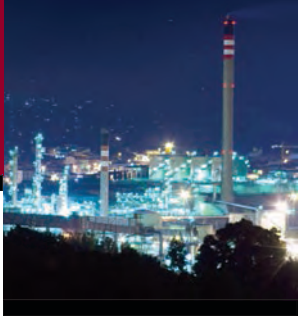
FL802 Multi-Channel Flame Detection Readout/Relay Display Module

- Capable of monitoring up to eight remote Flame Detectors.
- ALARM, WARN, and FAULT common relays and open collector outputs.
- LED readouts for each channel.

TL105 Test Lamp

- Battery operated, rechargeable.
- Designed to test UV, UV/IR and IR detectors and is explosion-proof.
- High-energy broad band radiation source emits sufficient energy in UV and IR spectra to activate detectors.
- Rotary switch selectable flicker rates.

Fire and Gas Systems



As a systems integrator, General Monitors offers single-point responsibility for total safety monitoring system project management. From single-point gas or flame detection to large multi-point PLC or DCS systems, you can count on General Monitors for safe, reliable, cost-effective plant protection. In support of applications worldwide, the Zero Two Series Monitoring System features universal approvals: CSA, FM, ULC, ATEX and/or CE Marking.

HazardWatch™

- Integrated fire and gas detection system FM certified to NFPA 72.
- User-friendly touch screen HMI display is menu-driven and supports custom plot plan graphics.
- FM certified for extinguishing/releasing with addressable loop interface for buildings fire protection.
- Uses Allen-Bradley ControlLogix™ as its logic solver.
- FM approved networking and Properietary Central Station HMI.

HazardWatch II™

- Integrated fire and gas detection system FM certified to NFPA 72 and IEC 61508 up to SIL 2.
- Enhanced user-friendly touch screen HMI for local display including support for custom plot plan graphics.
- FM certified to IEC 61508 as a complete system.
- Single or dual processor Allen-Bradley ControlLogix™ logic solver configuration.

Zero-Two Series System

- Monitors any combination of Combustible Gases, H_2S, Flame, Toxic Gases, and O_2 Deficiency.
- Open architecture allows system to accommodate other sensing devices for smoke detection, heat detection and manual call points.
- Each Module connects to a remote sensor or detector and continuously displays each location's status.
- Modular system can be easily reconfigured or expanded as requirements change.

MC600 Multi-Channel Controller

- Provides up to six channels of continuous gas monitoring.
- Compatible with General Monitors' hydrocarbon sensors, H_2S sensors, Models S4000CH, S4100C, S4000TH, S4100T, IR400, IR4000M, IR5500, IR700, TS4000H, Gassonic Observer-i, and Gassonic Surveyor gas detectors.
- Modular plug-in signal cards provide system scalability.
- Dual redundant Modbus communication provides complete status and control capability.

CC02A Serial Communications Interface

- On-line access to operational and setup data registers.
- RS-485 and RS-232 Modbus RTU ports.
- Master/Slave configuration provides increased fault tolerance from additional CC02A.
- Communicates with multiple nodes; delivers cost effective solution for large systems.
- Implements all necessary protocol conversions and error check routines.

TA502A Single-Channel Generic Trip Amplifier

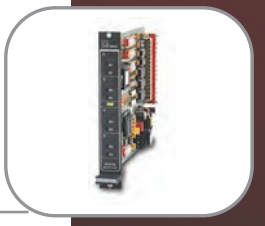
- Designed for use with our Zero Two Monitoring System, connects to any 4-20mA transmitter.
- Microprocessor-based electronics for high reliability.
- User setup and setup check modes for easy setup or change.
- LED indications of status, open collector and relay outputs for fault, low alarm and high alarm.
- Selection for oxygen deficiency scale on menu.

MD002 Monitored Driver Output Module

- Designed for four independent outputs requiring monitoring in their non-active state such as beacons, horns, etc.
- Each driver output is independent and has circuitry to monitor short and open circuits in the field wiring.
- Contains microprocessor-based electronics for advanced fault checking and operation.
- Manual abort and release input simplifies system wiring.
- Remote setup and interrogation, via RS-485 serial communications interface, available with CC02A Modbus communications module.

IN042 Four-Zone Input Module

- Four independent zones provide more available inputs.
- Designed for use with two wire field devices such as smoke detectors, pull switches and manual callpoints.
- LED status indication for each zone.
- Each zone has a dedicated reset/inhibit switch for resetting latched alarms and inhibiting the zone from alarm output.
- Each zone provides line monitoring to conform with NFPA requirements.

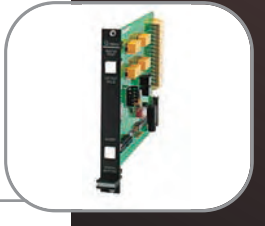


ZN002A Three-Zone Control Module

- Three zone control module provides zoning and voting functions for three separate, eight input-zones.
- Each zone has independent voting, 1 or 2 votes per zone.
- Inputs protected against transients, over-voltage, over-current and reverse polarity.
- Remote setup and interrogation, via RS-485 serial communications interface, available with CC02A Modbus communications module.

FM002A Facilities Module

- Provides a range of common facilities for all Zero Two Series Modules housed in the chassis.
- Allows the chassis to be daisy-chained to serve up to 100 chosen Zero Two Modules.
- Common alarm outputs for A1, A2, Fault and Unaccepted Alarm (UA).
- Master Reset pushbutton resets any latched alarm condition which is no longer valid.
- Accept pushbutton acknowledges alarms by de-activating the unaccepted alarm outputs.



Specialty Products

General Monitors designs, develops and manufactures a wide range of specialty products that provide safety monitoring solutions to support unique plant processes and environments. Our knowledgeable salespeople and field technicians have vast applications experience in diverse plant environments worldwide, which frequently helps them solve the most challenging safety monitoring problems. Backing up our global sales team is an after-sale service, repair and spare parts system for continued reliability of service long after the sale is made.

PA4000 Photoacoustic Gas Monitor

- Photoacoustic infrared technology for accurate measurement with minimum interference.
- Wide operating temperature range, 32°F-122°F (0°C -50°C).
- Concentration range from %v/v, ppm, to ppb depending on gas.
- Easy-to-read display shows gas concentration(s) and alarms.
- Easy installation, operation and maintenance.

Second Sight TC Remote Gas Detection System

- IR remote gas detector simultaneously detects up to four gases from up to 2000 m.
- Features wide field of view and long detection range.
- Option to deselect areas not of interest or known false alarm sources.
- Requires no gas calibration in the field.
- Provides additional safety layer for combustible/toxic gas detection.

SM100 Sampling Module

- Suitable for Combustible Atmosphere, Gas Detection, Oxygen Deficiency, Toxic Atmosphere IDLH, Toxic Atmosphere Non-IDLH.
- Works with gas monitor, sampling areas that are too remote, inaccessible, hot or cold for direct monitoring.
- GP (General Purpose) and XP (Explosion Proof) versions of aspirated and pumped modules available.
- C-UL-US approved, NEMA 4X.

Custom Products

- Individually designed to provide the best solution to unique application requirements.
- Custom product designs include process monitoring systems, OEM packaging and labeling, shipboard rugged systems, and customer-defined packaging solutions.
- Customized gas detection and flow systems built to customer specifications.

Worldwide Sales Support

General Monitors serves customers around the world from its strategically located design and manufacturing facilities, its regional sales/services offices and its network of over 50 manufacturers' representatives offices. No matter where you are located, we are your local supplier with convenient resources available to answer questions and provide product support. Backing up this global sales team is an after-sale service, repair and spare parts system for continued reliability of service long after the sale is made.

Our knowledgeable salespeople and field technicians are always available to visit your facility to review your existing monitoring systems. They have vast applications experience with literally hundreds of facilities that can be put to work for you in a number of ways. Many times they will already have had experience with your problem and are able to provide solutions supporting:

- Aircraft Hangars
- Chemical Processing
- Compressor Stations
- Confined Spaces
- Electrical Generators
- Mining
- Offshore Platforms
- Parking Garages
- Pipelines
- Refineries
- Rocket Launch Facilities
- Spray Paint Booths
- Warehouses
- Water and Sewage Treatment

Our responsive customer service staff is available to you during regular business hours by telephone or via the Internet. They have extensive product knowledge and have been trained to help you with a wide range of requests. Need a quote in a hurry, product data sheets, testing information, or expedited delivery? Our people are not only trained, but given the responsibility to make decisions immediately that can solve your problems.

Need information after business hours? Visit our web site to learn about General Monitors and its product lines. The web site provides a wealth of valuable information that includes:

- Product Search By Gas
- E-Tech Support Requests
- FAQ Library
- Customer Care Center
- Technical Resources
- Product Videos

In business since 1961, General Monitors is dedicated to one single objective: “Protection for Life.” People who work in hazardous environments know they can count on us to solve workplace safety problems to reduce injury and protect property.

Global Service. Anytime, Anywhere.

Responsive, Expert Service

No matter where you are, 24-hour technical service and support is available from General Monitors. Our two manufacturing and six sales and service facilities are located for efficient support worldwide.

Quality Commitment

General Monitors brings a respected reputation for quality and reliability to the gas and flame detector market. We are ISO 9001:2008 certified, utilizing continuous process improvement quality programs.

GENERAL MONITORS
Protection for life.

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