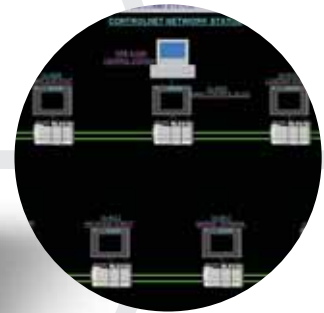
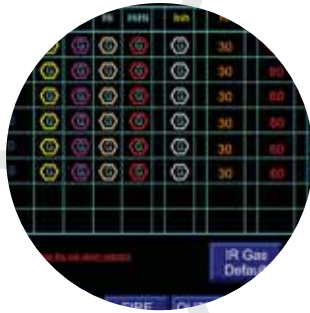




HazardWatch™

FM Certified
Fire & Gas
Detection
System



GENERAL MONITORS
Protection for life.

**FM Certified
to NFPA 72**

State of the Art Fire and

Intelligent, Modular and Flexible

The HazardWatch™ Integrated Fire and Gas Detection System from General Monitors represents the next generation in highly intelligent monitoring solutions designed to help customers reduce hazard vulnerability and meet the world's most demanding safety standards. HazardWatch is an innovative, modular system that is highly scalable and delivers:

- > FM Certified to NFPA 72 Compliance
- > FM Certified proprietary central station monitoring
- > FM Certified as both fire alarm panel & gas controller
- > FM Certified fault tolerant digital communications
- > FM Certified releasing control panel
- > Remote I/O capability
- > Optional fiber optic communications
- > Color touch-screen operator interface
- > Data and event logging
- > Supports third party device integration
- > Gas calibration histories (combustible and H₂S gas)
- > Simple, reliable and cost effective field wiring topology
- > Addressable detection loop for buildings



Wall mounted NEMA 12 enclosure. Customer connections made at rail mounted "swing link" terminal blocks organized by input / output type.

PLC processor and touchscreen fitted with non-volatile memory.

HazardWatch System Overview

The HazardWatch System is designed with Rockwell Automation's industry proven Allen-Bradley ControlLogix™ programmable logic controller (PLC) technology and General Monitors advanced gas and flame detection field devices. Offering intelligence, flexibility, and reliability, the system's controller hardware configuration and software have been tested by Factory Mutual to verify NFPA 72 compliance.

The principal elements of the HazardWatch System include:

- > Stand-alone local fire and gas alarm panel with touch screen operator interface
- > Power supply and battery back-up to support the fire and gas system per NFPA 72
- > Optional HazardNet dual media (coaxial cable or fiber optic) fault tolerant communication network, which supports communication between the local gas and flame panels and the optional HazardWatch Central Station
- > Optional computer-based HazardView Workstation (with AC-powered UPS) to provide FM approved central station monitoring
- > Scalable from small systems to large plants
- > Link up to 13 local gas and fire alarm panels over a network up to 25 kilometers long
- > Easy integration with third party auxiliary devices such as horns, beacons and fire suppression systems
- > FM approved MODBUS, Ethernet or ControlNet system communications to DCS or ESD Systems
- > HART® sensor communication support

The system's local and network communications equipment are based on ControlNet, a widely used high-speed, industrially hardened control and communication protocol.

A More Reliable Safety Solution

The HazardWatch System combines the proven expertise of the industry's leaders in safety and automation. Developed with the gas/flame detection and systems integration expertise of General Monitors, as well as the process control/automation expertise of Rockwell Automation, the HazardWatch System is a powerful and flexible total safety solution. You can count on HazardWatch to ensure the safety of your people, equipment and plant.



Gas Protection

NFPA 72 Compliant

FM Certification

ControlLogix™ PLC Platform

NFPA 72 Compliant
User-Friendly
Touchscreen
Interface



HazardNet
Communications



Addressable Loop
for Buildings



Modular Total Safety



HazardNet

Redundant Fault Tolerant Communication
Copper or Fiber Media | Distances to 25Km | 5Mbit Bandwidth

A Powerful, Versatile Solution

From distributed control to network communications to control software to operator interfaces to field devices, HazardWatch is the complete answer in a wide range of applications:

Solution



- > Offshore Platforms
- > Refineries and Pipelines
- > Gas Compressor Stations
- > Storage Facilities
- > LNG Facilities
- > CNG Fueling Terminals
- > Tanker Loading/Unloading
- > Chemical Plants
- > Electric Power Plants
- > Aircraft Maintenance Areas
- > Aerospace Launch Facilities
- > Automotive Plants

Advanced Flame and

Intelligent, Modular and Flexible

The HazardWatch System combines the proven expertise of the industry's leaders in safety and automation. Developed with the gas/flame detection and systems integration expertise of General Monitors, as well as the process control/automation expertise of Rockwell Automation, the HazardWatch System is a powerful and flexible total safety solution. You can count on HazardWatch to ensure the safety of your people, equipment and plant.



FL4000 Flame Detector

The FL4000 multi-spectral infrared (MSIR) flame detector provides superior false alarm immunity with the widest field of view utilizing neural network technology (NNT). Options include relays, Modbus and HART.



FL3100 Series Flame Detectors

The FL3100 Series UV, UV/IR and DFIR Flame Detectors offer continuous optical path monitoring (COPM) and digital frequency analysis (DFA). They are suitable for petro-chemical and industrial applications.



S4000CH Combustible Gas Detector

The S4000CH Combustible Gas Detector features a highly intelligent microprocessor-based design combined with the most reliable catalytic bead sensing technology. Options include relays, Modbus and HART.



IR400 Hydrocarbon Gas Detector

The IR400 Infrared Point Detector features a fail-to-safe operation design to detect combustible gases within the lower explosive limit (LEL). No routine calibration is required, which reduces maintenance requirements. HART option available.



IR5000 Open Path Gas Detector

The IR5000's advanced single beam sensing technology ensures high accuracy to eliminate drift and false alarms. It is ideally suited for monitoring tank farms, gas spheres, fence lines and rows of valves or pumps.

Gas Detectors

S4000TH Hydrogen Sulfide Gas Detector

The S4000TH Intelligent Sensor features a highly intelligent microprocessor-based design for use with thin film metal oxide semiconductor (TFMOS) sensors. Options include relays, Modbus and HART.



Gasonic Ultrasonic Gas Leak Detectors

Gasonic ultrasonic gas leak detectors offer fast detection of high pressure gas leaks without requiring the gas to come into contact with the detector. They are ideally suited for outdoor installations.



TS4000 Toxic Gas Detector

This intelligent toxic gas detector monitors eleven different gases with electro-chemical cell sensors. It features an integral galvanic isolation design, which permits hot-swapping of sensors.



TS400 and TS420 Gas Detectors

The TS400 Toxic Gas Detector and TS420 Oxygen Deficiency Detector feature electro-chemical cell sensors. They feature built-in LCD status indicators and are two-wire loop powered for simple installation.



IR7000 Carbon Dioxide Detector

The IR7000 features highly reliable dual beam infrared point detection that senses carbon dioxide to the ppm level with fail-to-safe operation. Virtually no routine calibration is required to reduce maintenance needs.



The Factory Mutual approval of gas controller and fire alarm functionality of HazardWatch is based on using FM approved versions of General Monitors flame and gas detectors with the system. Non-FM approved flame and gas detectors may be electrically compatible and suitable for use with the HazardWatch system but they are not FM approved for use with the system.

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 9001:2000 certified, utilizing continuous process improvement quality programs.



GENERAL MONITORS
Protection for life.

www.gmsystemsgroup.com | www.generalmonitors.com | **Email** systems@generalmonitors.com

General Monitors Systems | 26806 Vista Terrace, Lake Forest, CA 92630 USA | **Phone** +1-949-699-4464 | **Fax** +1-949-586-8175 | **Email** info@gmsystemsgroup.com

General Monitors Systems, Houston | 9776 Whithorn Drive, Houston, TX 77095 USA | **Phone** +1-281-855-6000 | **Fax** +1-281-855-3290 | **Email** gmhou@generalmonitors.com

General Monitors Systems Asia Pte. Ltd. | Block 5, #05-22/23, AMK Tech II, Ang Mo Kio Industrial Park 2A, Singapore 567760
Phone +65-64821921 | **Fax** +65-64823582 | **Email** info@gmsystemsgroup.com

Global Solution Partners Offices

Autochim | Les Portes de Morangis 9, Avenue des Froides Bouillies, 91420 MORANGIS, France | **Phone** +33-1-69-79-61-61 | **Fax** +33-1-69-79-61-62 | **Email** autochim@autochim.com

ASME (Autochim Systems Middle East) | P.O. Box 26166, Abu Dhabi, U.A.E. | **Phone** +971-2-6265-774 | **Fax** +971-2-6265-778 | **Email** asme@autochimsystems.com

Safco Fire & Gas | Via Papa Giovanni XXXIII, 5, 20090 Rodano, Milan, Italy | **Phone** +39-02-95321142 | **Fax** +39-02-95328094 | **Email** info@safcofg.it

Sales Offices

26776 Simpatica Circle
Lake Forest, CA 92630
USA

Phone +1-949-581-4464

Fax +1-949-581-1151

Email info@generalmonitors.com

9776 Whithorn Drive
Houston, TX 77095
USA

Phone +1-281-855-6000

Fax +1-281-855-3290

Email gmhou@generalmonitors.com

No. 2 Kallang Pudding Road
#09-16 Mactech Building
Singapore 349307

Phone +65-6748-3488

Fax +65-6748-1911

Email genmon@gmpacifica.com.sg

P.O. Box 61209
Jebel Ali

Dubai, United Arab Emirates

Phone +971-4-8815751

Fax +971-4-8817927

Email gmme@emirates.net.ae

Heather Close

Lyme Green Business Park

Macclesfield, Cheshire

United Kingdom SK11 0LR

Phone +44-1625-619583

Fax +44-1625-619098

Email info@generalmonitors.co.uk