

**3M** Science.  
Applied to Life.™

Gas & Flame Detection

# Fixed Gas & Flame Detection

## Product Overview - EMEA Region



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## Contents

### Fixed gas detectors

Tertiary use

5 OLC 10 / OLCT 10

5 OLCT 10N

6 CTX 300

6 Car Park Solutions

### Fixed gas detectors

Industrial use

7 OLCT 20

7 OLC / OLCT 100

8 OLCT 60

8 DG Series

8 iTrans 2

9 700 Series

9 Meridian

9 GD10P

10 GD10 PE

10 Spyglass

10 GD1

### Flame detectors

11 DF-TV7 Series

11 Flamevision Series

### Control systems

12 SV4B

12 MX 15

13 MX 32 v2

13 MX 43

13 MX 52

14 MX 62

14 Multisafe - MX

### Wireless Technology

15 CXT

15 OLCT 80W

16 BM 25 & BM 25W

16 MX 40

16 Site Sentinel

17 SW-AV Series alarms

### Customised Systems and Solution

18 Sampling solutions

Samsys Sampling cabinet with detector

18 Syntel system

### Accessories

20 Backup batteries

20 Solenoid valves

20 Manual call points

20 Audible and visual alarms

20 Calibration gas

20 Monitors

# Fixed Gas & Flame Detection

With the acquisition of Scott Safety, Detcon, Oldham, Simtronics and GMI, 3M has become one of the largest manufacturers of gas and flame detection products. These global brands bring together over 100 years of industry experience across a wide range of innovative detection solutions. This adds significant adjacent strength to the Personal Safety Division of 3M that boasts leading products in a wide range of PPE markets, providing a broader array of safety products and solutions, enhancing our relevance to customers worldwide.

Every customer scenario demands a different, customized approach, and 3M applies expertise in building the right plan for the right hazards, every time. Our complete portfolio and industry-leading solutions offer expert perspective and quality products you can rely on in the most critical situations. When it comes to superior value, efficacy, efficiency and service, the gas and flame detection team from 3M delivers like no one else.

3M uses its global capability, manufacturing excellence and customer engineering to provide end-to-end gas and flame detection solutions for a wide range of hazards worldwide. With an industry-leading, comprehensive portfolio of products and services, our commitment to cross-platform integration provides protection for today and confidence for tomorrow.

Our products are sold through a world class system of knowledgeable distributors, manufacturers' representatives and sales subsidiaries. Our customer commitment does not stop at product delivery but encompasses ongoing services. From custom-designed solutions to unmatched technical support, our gas and flame detection solutions are backed by expert judgment and premier technology that you can count on in any emergency.



**The mission of 3M Gas & Flame Detection is to be the best supplier of fixed gas and flame detection systems worldwide. We endeavor to provide the highest quality and the best service to all of our customers.**

**Are you looking for the best solution for your application?**

Visit our website to find your nearest branch: <https://gasdetection.3m.com/en>. Our teams will answer your questions and take the time to establish your needs.

**Are you looking for more than a gas detector?**

Our products are designed to suit your applications. From a basic installation to multi-zone protection, our fixed systems range has all the solutions you need. Whether on-site or from site drawings, our team examines all your gas and flame detection plans and provides you with the solutions you need right up to the maintenance of your systems.

**Our expertise:**

- Analysis of existing situation/project study/assessment
- Drafting of specifications, design and installation
- On-site maintenance and installation
- After sales service: calibration and technical support
- Conformance testing (regulations, standards, etc.)

**Our wide range of applications:**

- Oil and gas industry
- Offshore drilling
- Petrochemical industry
- Food processing industry
- Water treatment
- Automotive sector
- LPG
- Natural gas
- Steel production
- Pharmaceutical industry
- Nuclear and thermal power plants

**Reliable and versatile products**

We understand that equipment failure leads to downtime costs. As an ISO 9001-certified company, we ensure that our products are developed with maximum reliability in mind. Our detectors are designed to suit virtually all applications.

**SERVICES**

**Commissioning:**

Our technicians ensure that your equipment is properly installed and in good working order, while following all the relevant procedures.

We also provide training in the use, maintenance and calibration of our products. We allow you to focus solely on your activity and leave the maintenance of your gas detection system to our specialists.

**Planning/iES Service:**

Our team of engineers work in close collaboration with our customers in order to optimise performance and installation costs. The planning service includes the system design, construction, installation and commissioning. Each system is delivered ready for use and installation, with all the necessary documentation.

**Repairs:**

Our own team of qualified technicians provide you with a fast, high-quality service using original parts. Our repairs are carried out in line with your requirements and we offer software upgrades at no extra cost.

**Equipment rental:**

Our customers have the option of renting equipment under contracts of variable lengths. Whether you need one unit or one hundred, for a period of one week or several months, we are committed to ensuring that you receive the equipment in the shortest possible time. Rental customers will receive tested, calibrated and fully functioning gas detection equipment, right out of the box.

**Field service:**

Our technicians come to you to perform all levels of on-site maintenance, particularly under maintenance contracts. This considerably reduces your equipment downtime and the need to stock replacement parts.

**Training:**

Our training courses are designed to help experienced professionals and newcomers alike. Trainees develop a better understanding of gas hazards and how to use their detectors effectively. We can provide customised training sessions at our approved centre or on site.

**Technical and customer support:**

Don't hesitate to get in touch if you have any questions regarding an order, applications or a service, or if you have a technical query. Our teams will be delighted to help you!

**Extended warranty program:**

There are various options available. Please contact your local representative.

# Fixed Gas Detectors

(for light industry / commercial)

## 3M™ Oldham OLC 10/OLCT 10

**Designed to detect combustible gases and exhaust gases**

- Up to two OLC 10s per channel
- Up to five OLCT 10s per channel
- Wheatstone bridge or 4-20 mA output (OLCT 10)

The OLC 10 and OLCT 10 are designed to detect combustible or toxic gases for tertiary applications (boiler plants, battery charging rooms, car parks, hospitals). Two OLC 10s can be connected to one detection channel to monitor the same area, without an additional junction box or extra wiring. Similarly, up to five OLCT 10s can be connected to one channel for the detection of CO, NO or NO<sub>2</sub> in a car park application.

**Gases Detected:** combustible, toxic and refrigerant (Methane, Propane, Butane, Hydrogen, LPG, LNG, CO, NO, NO<sub>2</sub> and Freons)

**Technology:** Catalytic, Electrochemical or Semi-Conductor

**Certifications:** CE • ATEX 3G (except Semi-Conductor version)



## 3M™ Oldham OLCT 10N

**Designed to detect oxygen and the most common combustible or toxic gases**

OLCT 10N is a digital detector compatible with the MX 32 and MX 43 controllers. It is possible to connect up to eight OLCT 10Ns to one MX 32 and up to thirty two OLCT 10Ns to one MX 43. Calibration using a standard gas is semi-automatic. It can be done by just one person without opening or adjusting the housing.

**Gases Detected:** Methane, Propane, Butane, Hydrogen, LPG, O<sub>2</sub>, CO, CO<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, NO, NO<sub>2</sub>

**Technology:** Catalytic, Infrared or Electrochemical

**Certifications:** CE • ATEX 3GD • IECEx • EAC



## 3M™ Oldham CTX 300

**Designed to detect toxic gases or oxygen in areas not classified as having an explosion risk**

- 4-20 mA output transmitter with optional backlit display
- 2-wire power supply option (electrochemical version)

The CTX 300 is designed to detect toxic gases or oxygen in areas not classified as having an explosion risk in the industrial or tertiary sectors. The CTX 300 is equipped with sensors that are pre-calibrated at our factory, facilitating maintenance and more specifically sensor replacements.

**Gases Detected:** more than 30 toxic gases, O<sub>2</sub>, CO<sub>2</sub>, VOCs, Freons

**Technology:** Infrared, Electrochemical or Semi-Conductor

**Power Supply:** 15-32 Vcc

**Output Signal:** 4-20 mA

**Certifications:** CE • CSA • EAC



## 3M™ Oldham Car Park System (CPS)

**Designed to detect combustible gases and exhaust gases in car parks and tunnels**

- Up to 256 detectors, 64 logic inputs and 256 relays per system
- Automatic ventilation control

The CPS (Car Park System) gas detection unit uses a fieldbus and can support up to 256 detectors and just as many relays connected in a network across 8 different lines. Up to 1,000 times faster than a pump system, the CPS is safer and provides optimal management of the ventilation while considerably reducing energy consumption. It has an easy to use interface consisting of a large LCD screen displaying measurements in real time, 3 LED lights and icons indicating the status of the system (Operation, Forced Operation, Fault, Alarm, Low Speed, High Speed, etc.).

**Gases detected:** Methane, Hydrogen, LPG, VNG, CO, NO, NO<sub>2</sub>

**Technology:** Catalytic or Electrochemical

**Power supply:** 85-260 Vac

**Outputs:** Relays, RS485 Modbus RTU

**Certifications:** CE • VDI 2053



# Fixed Gas Detectors (for industry)

## 3M™ Oldham OLCT 20

Designed to detect all gases in areas classified as having an explosion risk

- Stainless steel, corrosion-resistant housing
- Pre-calibrated sensors
- M25 or  $\frac{3}{4}$  NPT thread

Small in size, OLCT 20 detectors are used for applications requiring less space (ventilation ducts, laboratory glove boxes, fume cupboards, etc.)

**Gases detected:** Combustible, toxic,  $O_2$ , VOCs, Freons

**Technology:** Catalytic, Electrochemical, Semi-Conductor

**Power supply:** 15-30 Vcc

**Output signal:** 4-20 mA

**Certifications:** CE • ATEX • EAC • China Ex • SIL2 (LEL and  $O_2$ )



## 3M™ Oldham OLC 100/OLCT 100

Designed to detect all gases in areas classified as having an explosion risk

- SIL2 certification (LEL,  $O_2$ , CO,  $H_2S$ ,  $NH_3$ )
- Stainless steel option available
- High temperature version up to 200°C

Intended for industrial applications, OLCT 100 gas detectors have an economical design and are reliable, durable and easy to use. The range is available in Wheatstone Bridge version (OLC) or in 4-20 mA-output analog transmitter version (OLCT). The 100 series is available in explosion-proof and intrinsically safe versions. The OLC 100 and OLCT 100 are SIL2-certified according to standards IEC 61508 and EN 50402 (depending on the gases detected).

**Gases detected:** Combustible, toxic,  $O_2$ ,  $CO_2$ , VOCs, Freons

**Technology:** Catalytic, Electrochemical, Infrared, Semi-Conductor

**Power supply:** 15.5-32 Vcc

**Output signal:** 4-20 mA, Wheatstone Bridge on OLC 100 model

**Certifications:** CE • ATEX • IECEx • INMETRO • China Ex • India Ex • EAC • MED • SIL2



## 3M™ Oldham OLCT 60

**Analog transmitter with display for detecting all gases in areas classified as having an explosion risk**

- Non-intrusive, one-man calibration
- Pre-calibrated sensors

The OLCT 60 is equipped with a local display and non-intrusive access to the maintenance menus. The sensor units are made of 316L stainless steel for increased resistance to corrosive agents, and they can be installed remotely up to 15 meters away from the display for detection in hard to access areas, while allowing direct readings. OLCT 60 is a versatile detector. Designed for industry, it is suitable for most applications.

**Gases detected:** Combustible, toxic, O<sub>2</sub>, CO<sub>2</sub>, VOCs, Freons

**Technology:** Catalytic, Electrochemical, Infrared, Semi-Conductor

**Power supply:** 16-30 Vcc

**Output signal:** 4-20 mA

**Certifications:** CE • ATEX • EAC • China Ex • SIL2 • (O<sub>2</sub> and combustible gases)



## 3M™ Simtronics DG-7 Series

**Analog transmitter with display for detecting all gases in areas classified as having an explosion risk**

- Non-intrusive, one-man calibration
- Pre-calibrated sensors
- Built-in relays
- Optional HART communication protocol

DG-7 gas detectors are designed for easy operation and maintenance and use a broad range of sensors. The electrochemical sensors are certified as intrinsically safe and can be replaced without disconnecting the detector. Made entirely of stainless steel and equipped with a bright display that changes colour depending on the status (alarm, fault, normal, pre-heating), the DG-7 is an industrial detector designed for harsh environments.

**Gases detected:** Combustible, toxic, O<sub>2</sub>

**Technology:** Catalytic, Electrochemical, Semi-Conductor (H<sub>2</sub>S)

**Power supply:** 18-28 Vcc

**Outputs:** 4-20 mA (0-22 optional), Relays, HART, LonWorks (for connection to the Syntel system)

**Certifications:** CE • ATEX • IECEx



## 3M™ Oldham iTrans 2

**Single or dual-sensor gas detector**

- Non-intrusive, one-man calibration
- RS485 output as standard
- Built-in relays and optional HART communication protocol

The iTrans2 is a single or dual-sensor transmitter for maximum flexibility and reduced installation costs. Its superior performance makes it suitable for any industrial application. Its features include: pre-calibrated sensors, local or remote sensors, non-intrusive calibration, optional stainless steel version, built-in relays, RS485 output for use in a network, high-visibility LED display, etc.

**Gases detected:** Combustible, toxic, O<sub>2</sub>, CO<sub>2</sub>

**Technology:** Catalytic, Electrochemical, Infrared

**Power supply:** 12-28 Vcc

**Outputs:** two 4-20 mA outputs, Relays, RS485 Modbus RTU or HART

**Certifications:** CE • ATEX • IECEx • NRTL/c et CSA • China Ex • INMETRO • EAC





## 3M™ Detcon 700 Series

**Analog transmitter with display for detecting all gases in areas classified as having an explosion risk**

- Specially designed for harsh environments and extreme conditions
- Water-proof, corrosion-proof and vibration-proof
- Non-intrusive, one-man calibration

The 700 Series has been designed for use in extreme environmental conditions. Its housing is made entirely of stainless steel and the electronics are encapsulated in resin to protect them from the external environment. The detection sensors are “smart”. They are pre-calibrated at our factory and can be recognised by the detector for easy field replacement.

**Gases detected:** Combustible, toxic, O<sub>2</sub>, CO<sub>2</sub>, VOCs

**Technology:** Catalytic, Electrochemical, Infrared, Semi-Conductor (H<sub>2</sub>S), Photoionization (VOCs)

**Power supply:** 11.5-28 Vcc

**Output:** 4-20 mA and RS485 Modbus RTU by default - Relays, HART and Foundation Fieldbus optional

**Certifications:** CE • ATEX • cCSAus • INMETRO • ABS • FM • EAC • SIL2



## 3M™ Meridian

**Triple-sensor universal gas detector**

- Smart hot-swappable sensors
- Non-intrusive, one-man calibration
- SIL2-certified by TÜV-Rheinland

The Meridian is a transmitter that can support one, two or three sensors for maximum flexibility. Its superior performance makes it suitable for any industrial requirement. Its features include: pre-calibrated smart sensors that are hot-swappable in ATEX zones, local or remote sensors, non-intrusive calibration, optional stainless steel version, built-in relays, RS485 output for use in a network, high-visibility graphic display, and global certification.

**Gases detected:** combustible, toxic, O<sub>2</sub>, CO<sub>2</sub>

**Technology:** Catalytic, Electrochemical, Infrared

**Power supply:** 18-30 Vcc

**Outputs:** 4-20 mA, RS485 Modbus RTU, Relays, optional HART Protocol

**Certifications:** CE • ATEX • IECEx • cCSAus • INMETRO • China EX • EAC • ABS • MED • SIL2



## 3M™ Simtronics GD10P

**Infrared gas detector**

- No re-calibration required on site
- 5 year warranty
- SIL2-certified by TÜV-Rheinland
- HART Protocol as standard

The GD10P is the benchmark for infrared detectors. Equipped with two infra-red sources, using multi-beam technology, the GDP10 is so reliable that it requires no maintenance throughout its entire useful life. Ultra-fast response time (T<sub>90</sub> < 2s), stainless steel construction, heated optics, 5-year warranty for the detector and 15-year warranty for the sources, global certification, and a HART communication protocol make the GD10P one of the most widely used detectors in the oil and gas industry.

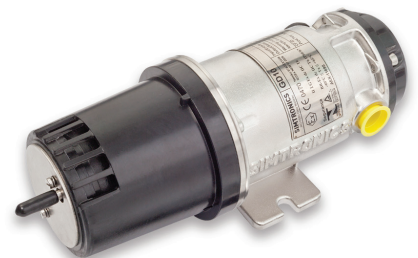
**Gases detected:** Combustible, biogas, CO<sub>2</sub>

**Technology:** Infrared

**Power supply:** 18-32 Vcc

**Outputs:** 4-20 mA, HART

**Certifications:** CE • ATEX • IECEx • CSA • UL • INMETRO • India Ex • ABS • MED • SIL2 (SIL3 compatible)



## 3M™ Simtronics GD10 PE

### High-sensitivity duct mount infrared gas detector

- No re-calibration required on site
- Shortest response time on the market
- 0-20% LEL range

Derived from the GD10P, the GD10PE high-sensitivity infrared detector is the ideal solution for detecting combustible gases in ventilation ducts and gas turbines, where conventional detectors are not suitable given that their response times are too long and they are not sensitive enough to trigger alarms in the shortest possible time.

**Gases detected:** Combustible

**Technology:** Infrared

**Power supply:** 18-32 Vcc

**Output:** 4-20 mA, HART

**Certifications:** CE • ATEX • IECEx • CSA • EAC • SIL2



## 3M™ Spyglass

### Open Path Infrared to detect combustible gases

- Detection range up to 200 meters
- Heated optics
- 10-year warranty for source
- SIL2-certified by TÜV-Rheinland

The Spyglass detector comprises an infrared transmitter and a receiver separated by 4 to 200 meters, meaning it can replace up to 20 point detectors. With IP66/67 certification, heated optics and a stainless steel construction, the Spyglass was designed to operate in harsh environments, and can handle up to 90% signal attenuation caused by dust, fog, rain, snow or vibrations. SIL2-certified, the Spyglass has a HART-compatible analog output, a RS485 output and built-in relays, as well as a 3-year warranty.

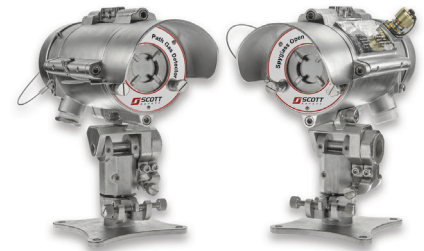
**Gases detected:** Combustible

**Technology:** Infrared

**Power supply:** 18-32 Vcc

**Outputs:** 4-20 mA, HART, RS485 Modbus RTU

**Certifications:** CE • ATEX • IECEx • FM • SIL2



## 3M™ Simtronics GD1

### Laser open path detector for the detection of H<sub>2</sub>S, CO<sub>2</sub> or CH<sub>4</sub>

- No calibration required throughout its entire life
- No cross interference with other gases
- Maximum sensitivity

The GD1 detector is a new type of open path detector with laser technology. The laser diodes that are used are specially designed for complete selectivity, maximum sensitivity and total reliability. This laser technology makes GD1 immune to external disturbances such as sunlight, rain or fog. The wavelength of the laser diode is monitored more than 500 times per second to ensure that the absorption ray perfectly matches the gas to be detected, and to eliminate any on-site calibration operations. Made entirely of stainless steel and equipped with heated optics, the GD1 is ideal for monitoring structures outdoors, along fences, at the boundaries of property, etc.

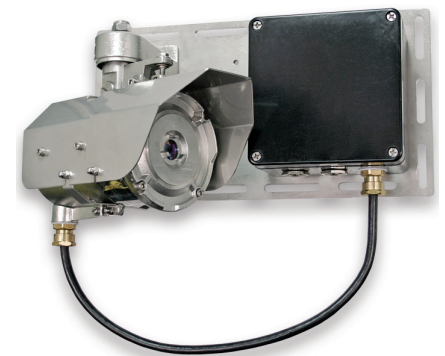
**Gases detected:** H<sub>2</sub>S, CO<sub>2</sub>, H<sub>2</sub>S+CH<sub>4</sub> (double reading)

**Technology:** Infrared (laser diode)

**Power supply:** 18-32 Vcc

**Outputs:** 4-20 mA, HART

**Certifications:** CE • ATEX • IECEx • SIL2 (in progress)



# Flame Detectors

## 3M™ Simtronics DF-TV7 Series

### Triple IR & UV/2IR flame detectors

- Excellent immunity to false alarms
- Wide field of vision (up to 120°)
- Continuous monitoring of optics

The DF-TV7-T includes three infrared detectors to detect hydrocarbon fires up to 80 meters away. It is designed for detecting fires that generate a large amount of smoke. The DF7-T is the first SIL3-certified flame detector!

The DF-TV7-V combines infrared and ultraviolet detectors for increased immunity to false alarms and a shorter reaction time. The DF-TV7-V detects hydrocarbon fires up to 45 meters away and is SIL2-certified.

**Type of flame detected:** Hydrocarbon fires

**Technology:** Triple IR (TV7-T) and Ultraviolet-Double IR combination (TV7-V)

**Power supply:** 18-28 Vcc

**Outputs:** 4-20 mA, Relays, HART (optional), LonWorks (for connection to the Syntel system)

**Certifications:** CE • ATEX • IECEx • India Ex • EN 54-10 • SIL3 (IR3) • SIL2 (UV/2IR)



## 3M™ Flamevision FV-40 Series

### Multi IR & UV/IR flame detectors

- Excellent immunity to false alarms
- Detection of all fire types
- Continuous monitoring of optics

While the Triple IR (IR3) or Multi IR (IR4) models are designed for hydrocarbon fires (and hydrogen fires in the case of the IR4 model) up to 65 meters away, the UV/IR versions are more suitable for detecting inorganic fires (hydrogen, ammonia, metals, etc.). All the models are SIL2-certified and equipped with a heating system to prevent frost or condensation from forming on the optics.

**Type of flame detected:** all fire types (hydrocarbons, hydrogen, metals, etc.)

**Technology:** Triple IR (IR3), Quad IR (IR4) and Ultraviolet-Infrared combination (UV/IR)

**Power supply:** 18-30 Vcc

**Outputs:** 4-20 mA, HART, RS485 Modbus RTU, Relays

**Certifications:** CE • ATEX • IECEx • FM • CSA • EN54-10 • MED • SIL2



# Alarm Stations

## 3M™ Oldham Surveyor 4B

### Single-channel controller without display

- Economical solution for small units (boiler plant, battery charging room)
- 2 programmable alarm thresholds

The Surveyor 4B is a single-channel controller designed to detect combustible gases in boiler plants, battery charging rooms and more generally in small units that need one or two detectors. It has two different alarm thresholds and built-in relays. It can be easily mounted to a DIN rail.

**Input:** Wheatstone Bridge sensor

**Outputs:** 2 relays (1 common gas and fault, 1 gas)

**Power supply:** 11.5 to 14 Vcc or 207 to 242 Vca

**Indicators:** Built-in audible and visual alarms

**Certifications:** CE



## 3M™ Oldham MX 15

### Single-channel controller with display

- Ideal for small units
- Compatible with any 4-20 mA detector
- 2 programmable alarm thresholds

The MX 15 is a single-channel controller designed for use in boiler plants and tertiary applications. The MX 15 controller is economical and very easy to use, and includes three built-in relays. It can be mounted on a wall or DIN rail.

**Inputs:** 4-20 mA, Wheatstone Bridge

**Outputs:** 3 relays (1 fault, 2 gas alarms)

**Power supply:** 21-30 Vcc and 230 Vca or 115 Vca

**Indicators:** Built-in audible and visual alarms

**Certifications:** CE • ATEX metrology • EAC





## 3M™ Oldham MX 32

### Single- or dual-channel controller with display

- Up to 8 analog or digital detectors
- 5 programmable alarm thresholds per channel
- OR, AND, NAND, VOTING logic for alarm
- Data logging

The MX 32 is a digital and analog controller designed for measuring gases in the atmosphere and more generally for processing any 4-20 mA analog or compatible on/off digital signal. Up to 8 detectors can be distributed on its 2 lines for increased cost savings. The MX 32 accepts different modules (analog inputs, relay outputs, logic inputs, analog outputs) that can be installed at a distance of up to several hundred meters for increased system capacity and flexibility.

**Inputs:** 4-20 mA, digital, Wheatstone Bridge

**Outputs:** 5 built-in relays and up to 16 external relays, 4-20 mA, RS485 Modbus RTU

**Power supply:** 22 to 28 Vcc or 100 to 240 Vca

**Indicators:** Built-in audible and visual alarms, optional additional alarm kit

**Certifications:** CE • ATEX metrology (in progress) • EAC • SIL1 (in progress)



## 3M™ Oldham MX 43

### Controller with 4 to 8 detection channels

- Up to 32 analog or digital detectors
- 5 programmable alarm thresholds per channel
- OR, AND, NAND, VOTING logic for alarm
- USB data logging

The MX 43 is a digital and analog controller designed for measuring gases in the atmosphere and more generally for processing any 4-20 mA analog or compatible on/off digital signal. Up to 32 detectors can be distributed on its 8 lines for increased cost savings. The MX 43 is SIL1-certified and accepts different modules (analog inputs, relay outputs, compatible logic input, analog outputs) that can be installed at a distance of up to several hundred meters for increased system capacity and flexibility. It is available in wall-mounted version and 19"-rack-mounted version.

**Inputs:** 4-20 mA, digital, Wheatstone Bridge

**Outputs:** 6 built-in relays and up to 24 external relays, 4-20 mA, RS485 Modbus RTU

**Power supply:** 22 to 28 Vcc and 100 to 240 Vca, optional embedded backup battery

**Indicators:** Built-in audible and visual alarms, optional additional alarm kit

**Certifications:** CE • ATEX metrology • EAC • MED • SIL1



## 3M™ Oldham MX 52

### Controller with 2 to 16 detection channels

- 3 programmable alarm thresholds per channel
- Standard 19" 3U format
- SIL2-certified

The MX 52 controller allows the connection of up to 16 analog or Wheatstone Bridge detectors. The device can be programmed from the front panel or using a computer. The MX 52 controller is as safe as it is reliable, and has SIL2 certification. It has one 4-20 mA output per channel, two alarm relays per channel, one general alarm relay and one fault relay.

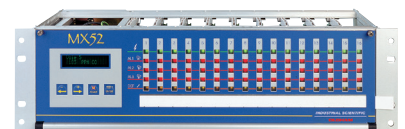
**Inputs:** 4-20 mA, Wheatstone Bridge

**Outputs:** 34 relays (1 common gas, 1 common fault, 32 gas), 4-20 mA, RS485

**Power supply:** 21 to 31 Vcc and 207 to 244 Vac or 103 to 122 Vac

**Indicators:** Built-in audible and visual alarms

**Certifications:** CE • ATEX metrology • EAC • SIL2



## 3M™ Oldham MX 62

### 8- to 64-channel controller with SIL2/SIL3 certification

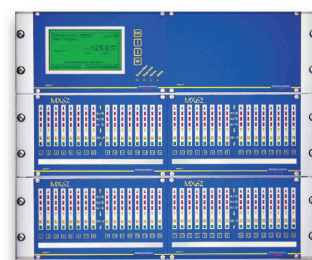
- OR, AND, NAND, VOTING logic for alarm
- Up to 128 alarm relays
- Redundant system

The MX 62 is a digital and analog controller designed for measuring gases in the atmosphere and more generally for processing any 4-20 mA analog or compatible digital signal. The electronics are fully redundant from the analog inputs to the relay outputs, for the high level of functional safety required by SIL3-certified systems. The MX 62 accepts different modules (analog inputs, relay outputs, analog outputs) that can be installed at a distance of up to several hundred meters for increased system capacity and flexibility.

**Inputs:** 4-20 mA, compatible digital detectors (OLCT 80 and T..W-EX)

**Outputs:** 4-20 mA, Relays, RS485 Modbus RTU and/or TCP/IP (optional)

**Certifications:** CE • ATEX metrology • EAC • SIL2/SIL3



## 3M™ Simtronics Multisafe - MX

### Fire, gas and intruder alarm system

- Built-in detection and suppression modules
- Unlimited capacity (more than 15,000 points of detection)
- SIL2/SIL3-certified by TÜV-Rheinland

The Multisafe-MX control panel is a fully integrated, SIL2/SIL3-certified system for gas and fire detection, fire suppression and intruder alarms. It offers a wide choice of configurations and meets any “Fire and Gas” requirements of industrial sites. In redundant mode, all the modules can be hot-swapped with no loss in safety function.

**Inputs:** 4-20 mA, addressable or conventional fire detectors, break-glass, etc.

**Outputs:** Relays, Monitored transistor outputs

**Certifications:** CE • EN 54 • NFPA 72 • UL 864 • MED • SIL2/SIL3



# Wireless Solutions

## 3M™ Detcon CXT

### SmartWireless gas detector

- Self-healing mesh network topology
- Internal battery power supply
- 2.4 GHz frequency
- Range of up to 2.4 km

CXT wireless gas detectors are equipped with rechargeable or disposable internal batteries and communicate via radio over distances of up to 2.4 km. This complete freedom to choose the type of electrical connection means that significant savings can be made on equipment installation costs and the system can be modified with great flexibility. Ideal for fixed or mobile solutions, the CXT offers up to 9 months of run time with a rechargeable battery and more when used with our solar-panel recharging solutions. Up to 32 CXT devices can communicate on the same secure mesh network.

**Gases detected:** Combustible, toxic, O<sub>2</sub>

**Technology:** Infrared, Electrochemical

**Power supply:** 9-30 Vcc or rechargeable battery or lithium battery

**Input/output:** 2.4 GHz DSSS radio transmission

**Certifications:** CE • ATEX • cCSAus



## 3M™ Oldham OLCT 80W

### Triple-sensor wireless detector

- Self-healing mesh or point-to-point network topology
- 2.4 GHz or 900 MHz FHSS
- Range of up to 3 km

The OLCT 80W is ideal for transmitting data wirelessly in an industrial setting. Using permitted frequency bands (2.4 GHz or 900 MHz depending on the country), the OLCT 80W can be integrated into a mesh network of 49 detectors or used by itself in a point-to-point system. FHSS (Frequency Hopping Spread Spectrum) technology ensures the integrity, security and reliability of the wireless network.

**Gases detected:** Combustible, toxic, O<sub>2</sub>, CO<sub>2</sub>, VOCs, Freons

**Technology:** Catalytic, Electrochemical, Infrared, Semi-Conductor

**Power supply:** 18 to 28 Vcc

**Inputs:** 2 4-20 mA inputs for connecting any analog detector

**Outputs:** 4-20 mA, RS485, relays (1 fault, 2 alarm)

**Certifications:** CE • ATEX • EAC • China Ex



## 3M™ Oldham BM 25 & BM25W

### 5-Gas site monitor

- Self-healing mesh network topology
- Up to 30 devices per network
- Range of 1 km
- Run time of up to 170 hours

The BM 25 is a multi-gas monitor that can detect up to 5 gases. It packs the benefits of a fixed detector into a transportable device. Extremely rugged and user friendly, the BM 25 is designed to protect intervention or maintenance teams in gas-risk areas during development or maintenance work. Used in an independent network, the BM 25W transfers alarm information from one device to the next via wireless radio communication. Adding a wireless X40 controller will give you local access to all the gas concentration measurements.

**Gases detected:** Combustible, toxic, O<sub>2</sub>, CO<sub>2</sub>, isobutylene (VOCs)

**Technology:** Catalytic, Electrochemical, Infrared, Photoionization

**Run time:** up to 170 hours, 135 hours in wireless mode, unlimited when connected to the intrinsically safe charger

**Alarms:** Ultra-bright flash with 360-degree visibility, 103 dB @ 1 meter, relays

**Radio transmission:** 2.4 GHz DSSS

**Certifications:** ATEX • CE • IECEx • CSA • INMETRO • EAC



## 3M™ Detcon Model X40

### Alarm station with 8 to 32 detection channels

- Up to 32 analog, digital or wireless detectors
- 2.4 GHz DSSS radio communication
- SD card data logging

The X40 is a digital and analog device designed for measuring gases in the atmosphere. Up to 32 detection points can be connected: 4-20 mA or Modbus wired detectors, wireless CXT detectors or wireless BM 25W monitors. The X40 accepts different modules (analog inputs, relay outputs, logic inputs, analog outputs) that can be installed at a distance of up to several hundred meters for increased system capacity and flexibility. It is available in different formats (NEMA 4X, NEMA7 fiberglass or stainless steel) and accepts an SD card as standard for saving measurements and events.

**Inputs:** 4-20 mA, RS485, Modbus RTU, wireless option

**Outputs:** Up to 32 relays, 4-20 mA, RS485 Modbus RTU

**Power supply:** 11.5-30 Vcc and 115-230 Vca, optional embedded backup battery

**Formats:** Stainless steel or fiberglass wall cabinet, CI I Div 1 explosion-proof version, rack version

**Certifications:** CE • CSA



## 3M™ Detcon Site Sentinel CXT

### SmartWireless mobile system

- Compatible with CX/CXT gas detectors and SmartWireless alarm systems
- Up to 32 wireless detectors
- Connection of up to 4 analog detectors
- Range of up to 2.4 km

The Site Sentinel CXT is an easily deployable wireless mobile system designed to monitor sites over short- or medium-length periods. In “receiver” mode, the Site Sentinel can receive signals from up to 32 wireless detectors and issue a local alert in the event of a gas alarm. In “transmitter” mode, the Site Sentinel can send the measurements from 4 detectors wired up to its analog inputs to a centralised system, and issue a local alert or remotely control the SmartWireless alarm stations. The system can be easily configured from the front panel, without opening the housing. The LCD screen displays the measurements from each detector on the network in real time. The many solar panel power supply options make the Site Sentinel fully independent. The set has Class I, Div 2 certification.

**Inputs:** 4 4-20 mA inputs, 32 wireless inputs

**Outputs:** 2.4 GHz DSSS radio transmission, relays, RS485 Modbus RTU

**Power supply:** 14-30 Vcc and/or internal battery, optional solar panel power supply

**Alarms (optional):** 1.75 Joules Xenon Flash, 80-90 dB siren @ 60 cm

**Certifications:** CE • cMETus





## 3M™ Detcon SW-AV Series Alarms

### SmartWireless alarm system

- Run time of 6.5 months with no alarm
- Up to 9 hours of continuous operation with alarm
- Range of up to 2.4 km

SmartWireless® audible and visual alarm stations are easy to install and allow significant savings to be made on wiring costs. Being mobile, they provide a high degree of flexibility and can be repositioned as necessary. SW-AV stations are used with wireless devices or the Site Sentinel CXT and have Class I, Div 1 and Class I, Div 2 certification.

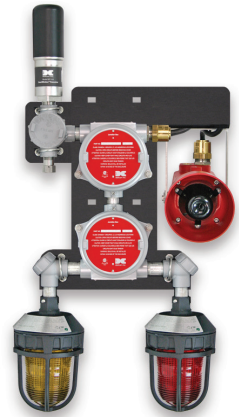
**Available models:** 1 light and 1 siren (Div 1), 2 lights and 1 siren (Div 2)

**Alarms:** 15 Joules and 108 dB @ 1 m (Div 2 versions); 5 Joules and 103 dB @ 1 m (Div 1 version)

**Power supply:** 6-30 Vcc or internal battery

**Run time:** 5 to 6.5 months without alarm, 4 to 9 hours with alarm, continuous operation with solar panel power supply

**Radio transmission:** 2.4 GHz DSSS



# Customised Systems and Solutions

## Sampling Solutions

### 3M™ Simtronics Samsys

Specially designed for monitoring carbon monoxide levels in car parks and tunnels using a pump system, the SAMSYS controller ensures comprehensive management of ventilation and alarms. Using strategically distributed sampling nozzles, the system analyzes the air quality across its 9 sampling channels on a cyclical basis. The SAMSYS can detect one or several toxic gases at the same time.

This compact and affordably priced controller offers a high level of performance: 4 adjustable alarm thresholds per detection channel, Modbus serial output, fully configurable relays for zone management. The SAMSYS can be linked to a maximum of 9 analysis channels, allowing it to monitor up to 35,000 m<sup>2</sup> of unobstructed surface area.

The SAMSYS is easy to install and is available in a wall cabinet. The system is configured via user-friendly menus on the front panel, without the need for a PC.

#### Measurement sampling cabinet

When it is not possible to install detectors in the environment to be monitored owing to temperature, pressure, humidity and other conditions, we can offer you personalised sampling solutions tailored to the application.

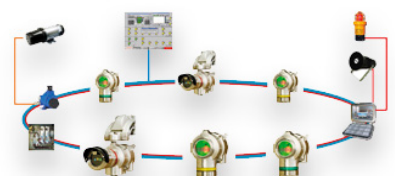
We operate and have developed systems in the following areas:

- Water treatment and detection of H<sub>2</sub>S, CH<sub>4</sub>, O<sub>2</sub>, Ozone
- Automotive laboratories and test centers and detection of CO, NO<sub>2</sub>, CH<sub>4</sub>, H<sub>2</sub>, NH<sub>3</sub>, CnHn
- Oil rigs and detection of H<sub>2</sub>S, CH<sub>4</sub>
- Cold storage rooms and food-processing industry and detection of NH<sub>3</sub>, Freons



### 3M™ Simtronics Syntel

The Syntel system is a secure, fault-tolerant fieldbus. Unlike conventional Modbus networks, Syntel does not use a master. As a result, there is no common point of failure and each network subscriber acts independently! The network accepts ring and star topologies, facilitating installation and extension and reducing wiring costs. The network supports DG-7 gas detectors, DF-TV-7 flame detectors, relay modules and redundant power supplies, but also any detector with a 4-20 mA output when connected to our MultiMECH interface. The Syntel system can interface with third-party systems via a standard or specifically developed HMI.





# Accessories & Monitors



Backup Batteries, Solenoid Valves, Manual Call Points, Audible and Visual Alarms, Calibration Gas



Monitors