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**Fixed Gas Detectors**

**GD10P**

IR Point Gas Detector

- No Field Recalibration Required
- SIL2 Compliant and Standard HART Interface

GD10P is a sophisticated infrared point gas detector that provides quick, accurate detection for a wide range of applications. Advanced design includes two solid-state IR sources that require no calibration or servicing during the product’s lifetime. Stable opto-mechanics provide an ultra-fast speed of response (T90 < 2s). Unparalleled life, warranty and savings on maintenance.

**Gases Detected:** Combustible, CO2

**Sensor Technologies:** solid state infrared

**Power In/Output:** 18-32VDC/0-20 mA, HART

**Approvals:** ATEX • CE • IECEx • CSA • UL • TUV SIL2 • INMETRO • ABS • CCCF pending

---

**Meridian**

Universal Fixed Gas Detector

- SIL2 Compliant Certified by TUV-Rheinland
- One Universal Product for Toxic and Combustible Applications

Meridian offers a single detector head that supports hot-swappable combustible and toxic sensors resulting in a true plug and play functionality. It can also have up to 3 heads allowing the detection of multiple gases. Its modular design reduces maintenance time and costs and allows easy integration into existing infrastructures. Advanced industry-standard communications protocols offer detailed diagnostics for preventative maintenance.

**Gases Detected:** toxic, combustible, O2, CO2

**Sensor Technologies:** electrochemical, catalytic, infrared, MOS

**Power In/Output:** 18-30VDC/0-20 mA, HART

**Approvals:** ATEX • CE • IECEx • cCSAus • SIL2 • INMETRO • ABS • MED • CHINA EX, CCCF, EAC, RCM, FCC and ANATEL pending

---

**Model 700**

Environmentally Bulletproof Gas Detector

- Specifically Designed for Harsh Environments and Extreme Locations
- Waterproof, Corrosion-Proof, Vibration-Proof

Model 700 fixed gas detectors feature a proven and robust design that includes an electropolished 316 stainless steel housing, multi-layered transient spike protection circuitry and 100% encapsulated electronics. The sensor electronics are completely protected and immune to water ingress and corrosion. Sensor elements are plug-in components and can easily be replaced in the field.

**Gases Detected:** toxic, combustible, O2, CO2, VOCs

**Sensor Technologies:** electrochemical, catalytic, infrared, MOS, photo ionization

**Power In/Output:** 11.5-28VDC/4-20 mA, RS485 Modbus RTU; optional relays, HART, and Foundation Fieldbus

**Approvals:** ATEX • CE • cCSAus • SIL2 • CEPEL • INMETRO • PESO • ABS • FM • CNEX • EAC • ANZ • DGMS • ITRI • CNS • CCCF pending
iTrans 2

One or Two Point Fixed Gas Detector

// Optional HART Communication Protocol
// Smart Infrared Gas Sensor Technology

iTrans 2 is equipped with intelligent electronics to provide one or two points of detection from a single head for maximum flexibility, superior performance and lower installation costs. With the optional HART Communication Protocol, the iTrans 2 offers remote diagnostics, set-up and calibration.

Gases Detected: toxic, combustible, O2, CO2
Sensor Technologies: electrochemical, catalytic, infrared
Power In/Output: 12-28VDC/ 4-20 mA, Modbus RTU, relays, optional HART
Approvals: ATEX pending • CE • IECEx • NRTL/c and CSA • China Ex • CCCF

Model 100

2-Wire Loop Powered Gas Detector

// Simple, Affordable, Durable
// 4-20 Milliamp Output

Model 100 Series gas detectors are 2-Wire loop powered and feature a non-intrusive interface, fully encapsulated intelligent electronics, comprehensive fault diagnostics, plug and play sensors, and a standard analog 4-20 mA output. Additional accessories include a loop powered digital display, Remote Alarm Module (RAM), HART, and a current to RS-485 converter.

Gases Detected: toxic, O2
Sensor Technologies: electrochemical
Power In/Output: 10-28VDC/ 4-20 mA, optional RS485 Modbus RTU, relays, HART
Approvals: ATEX • CE • CSA • ABS • Customs Union

Models 500 and 600

MicroSafe Intelligent Fixed Gas Detector

// Simple Menu-driven Calibration and Programming
// Plug & Play Sensors and Transmitters

Models 500 and 600 gas detectors feature a non-intrusive operator interface. Calibration and programming instructions appear in simple intuitive and sequential script on a 16-character backlit display. The transmitter design incorporates extensive fault diagnostics with each condition conveniently identified on the transmitter display.

Gases Detected: toxic, combustible, O2, CO2
Sensor Technologies: electrochemical, catalytic, infrared, MOS
Power In/Output: 12-28VDC/ 4-20 mA (500); RS485 Modbus RTU, relays (500 & 600)
Approvals: ATEX • CE • cCSAus/NRTL (US OSHA Certified) • ABS • FM (TP Series Only) • CNEX (TP and DM Series Only)

DG Series

Intelligent Fixed Gas Detector

// Optional HART Communication Protocol
// 4-20 mA and Relays Standard

DG Series gas detectors are designed for easy operation and maintenance and employ a wide choice of sensor types. Constructed from a common housing and electronics, the device includes a stainless steel enclosure. The sensor elements are intrinsically safe protected and may be replaced with the detector powered.

Gases Detected: toxic, combustible, O2
Sensor Technologies: electrochemical, catalytic, MOS
Power In/Output: 18-28VDC/ 4-20 mA, relays; optional 0-22 mA, HART, Lonworks (Syntel)
Approvals: ATEX • CE • IECEx • CSA pending
**OLCT 60**

4-20 mA Analog Transmitter With Display

// Simple Non-intrusive One Person Calibration
// Pre-calibrated Sensors

OLCT 60 is equipped with a local display and non-intrusive calibration. Housed in 316L stainless steel, the sensors are resistant to corrosion and can be remote mounted. The versatile instrument is the ideal solution for gas detection needs throughout various industries and in a wide variety of applications.

**Gases Detected:** toxic, combustible, O2, CO, VOCs, refrigerant

**Sensor Technologies:** electrochemical, catalytic, infrared, semiconductor, catharometer

**Power In/Output:** 16-30VDC/ 4-20 mA

**Approvals:** ATEX • CE • EAC

---

**OLCT 100**

4-20 mA Analog Transmitter Without Display

// SIL2 Compliant for Combustible (LEL), O2, CO, H2S, NH3
// Stainless Steel Option Available

An economical design for industrial applications, OLCT 100 gas detectors combine reliability, durability and ease of use. OLC 100 includes a Wheatstone bridge (catalytic only) output while OLCT 100 provides a 4-20 mA output. OLCT 100 is available in explosion proof or intrinsically safe versions. SIL2 certified according to IEC 61508 and EN 50402. Loop power option.

**Gases Detected:** toxic, combustible, O2, refrigerant

**Sensor Technologies:** electrochemical, catalytic, infrared, semiconductor

**Power In/Output:** 15.5-32VDC/ 4-20 mA; Wheatstone Bridge option for catalytic

**Approvals:** ATEX • CE • IECEx • SIL2 • INMETRO • NEPSI • India Ex • EAC • MED

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**OLCT 20**

Economical 4-20 mA Transmitter Without Display

// Corrosion Resistant Stainless Steel Housing
// Easy Disconnect of Sensors by Turning the Unit Head

OLCT 20 gas detectors are designed for indoor and outdoor facility monitoring to satisfy gas detection requirements at a reasonable price. OLCT 20 provides quick response times and can be fitted on a housing with an M25 or 3/4” NPT thread. A high-temperature version allows operation at 200°C.

**Gases Detected:** toxic, combustible, O2, VOCs, refrigerant

**Sensor Technologies:** electrochemical, catalytic, semiconductor, catharometer

**Power In/Output:** 15-30VDC/ 4-20 mA

**Approvals:** ATEX • CE • SIL2 for combustible and O2

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**Spyglass**

Open Path Combustible Gas Detector

// Detects Over a Range of up to 200 Meters
// Built-in Event Recorder

Spyglass can replace 20 point gas detectors, saving up-front and ongoing maintenance costs. There are only two units to service and the maintenance requirements are minimal. Spyglass detects hydrocarbon gases by analyzing the absorption of radiation caused by gases in the atmosphere.

**Gases Detected:** combustible

**Sensor Technologies:** open path

**Power In/Output:** 18-32VDC/ 4-20 mA, RS485 Modbus RTU, HART

**Approvals:** ATEX • CE • IECEx • SIL2 • FM • FMC
**GD1**

Toxic Laser LOS Gas Detector with HART

- No Calibration Required
- Can Replace Multiple Standard Detectors to Cover the Same Risk

The GD1 sets a new standard in toxic gas detection. Using a tunable laser diode, the device provides enhanced coverage and fail-safe detection. The advanced design eliminates environmental interference from sun, rain and fog. No recalibration required. Ideal for open areas and fence line monitoring.

Gases Detected: hydrogen sulfide (H2S)

Sensor Technologies: infrared (tunable laser diode)

Power In/Output: 18-32VDC/ 0-20 mA, HART

Approvals: ATEX • IECEx • SIL2

**CTX 300**

4-20 mA Transmitter with Optional Backlit Display

- 2-Wire Loop Powered Option (Electrochem Only)
- Commercial or Industrial Applications in Unclassified Areas

CTX 300 is designed to detect hazardous levels of toxic gases and oxygen in unclassified areas. It has the flexibility to protect against many potentially hazardous environments for both commercial and industrial applications. Maintaining the unit is easy with pre-calibrated sensors.

Gases Detected: toxic, O2, CO2, refrigerant

Sensor Technologies: electrochemical, infrared, semiconductor

Power In/Output: 15-32VDC/ 4-20 mA

Approvals: CE • CSA • EAC

**OLCT 10N**

Designed to Detect the Most Common Gases

- Wheatstone Bridge or 4-20 mA (OLCT 10N) Transmitter Without Display
- For Commercial and Light Industrial Applications

Intended for use with the MX 43 controller, up to 32 gas detectors can be connected on the same digital line or distributed on 8 lines. All transmitter information is received by the controller in less than 1 second. Operator interface is non-intrusive using a handheld magnet and features one person calibration.

Gases Detected: CO, H2S, NO2, NO, NH3, combustible

Sensor Technologies: electrochemical, catalytic, infrared

Power In/Output: 15-30VDC (OLCT 10N)/ 4-20 mA; Wheatstone Bridge option for catalytic (Oldham controllers only)

Approvals: ATEX • CE • IECEx • EAC

**AirAware**

NEMA 4 General Purpose Indoor Monitor

- Light Industrial or Commercial Applications
- Dual Alarm LEDs and Push-Button Operation

AirAware is the logical choice for areas that require continuous monitoring without the need of an explosion-proof enclosure. It provides discrete monitoring with enhanced aesthetics becoming the ideal solution for reliable, low-cost fixed-point detection. An optional vanity plate hides the display.

Gases Detected: CO, C2, H2S, NO2, SO2, O2, NH3, NO, or HCl

Sensor Technologies: electrochemical

Power In/Output: 12-24VDC/ RS485 Modbus RTU; 4-20 mA, relays & on board audible alarm optional

Approvals: CSA for non hazardous area
MultiFlame DF-TV7-T and DF-TV7-V

Triple IR & UV/2IR Flame Detector

// Excellent False Alarm Immunity
// Wide Field of View (up to 120°) and Continuous Auto-check of Optical Lens

DF-TV7–T uses three wavelengths for fast and accurate detection of hydrocarbon fires and is ideal for use in dirty environments or for the detection of smoky fires. DF-TV7–V uses combined ultraviolet/infra-red (UV/2 IR) optical technology and provides industry-leading immunity to false alarms while maintaining optimum sensitivity to unwanted fires.

Type of Flame Detected: hydrocarbon fires
Sensor Technologies: multi-spectrum IR (DF-TV7-T); combined ultraviolet & dual IR (DF-TV7-V)
Power In/Output: 18-28VDC/ relays, HART optional; 4-20 mA (DF-TV7-T); 0-20mA or 4-20 mA, optional Lonworks (DF-TV7-V)
Approvals: ATEX • CE • IECEx • MED • SIL3 (DF-TV7-T) • SIL2 (DF-TV7-V)

FlameVision FV300 Series

Multi IR Array Flame Detector

// Longest Range of Detection (165 feet)
// Provides Flame Detection for up to 4 Flames Simultaneously

FlameVision FV300 is a revolutionary flame detection instrument that utilizes a focal plane array of 256 infrared sensors as a sensing component to locate the angular position of a fire within the field of view. An optional CCTV camera provides location information and allows the operator to quickly verify the alarm.

Type of Flame Detected: hydrocarbon fires
Sensor Technologies: infrared array with 256 sensors, optional CCTV camera
Power In/Output: 18-30VDC/ 4-20 mA, RS485 Modbus RTU, relays, video output optional
Approvals: ATEX • CE • IECEx • CSA • FM • EN-54

FlameVision FV400 Series

Triple IR Solar Blind Flame Detector

// Cost-Effective Solution in Standard Flame Detection
// Video Verification via Optional Integrated Flame-proof Camera

FlameVision FV400 uses a Triple IR solar blind technology combined with flame detection algorithms to provide high performance sensing capabilities for hydrocarbon fires. This includes the ability to reliably sense flames through high densities of solvent vapors and black smoke, increasing consistent detection.

Type of Flame Detected: hydrocarbon fires
Sensor Technologies: triple infrared solar blind, optional CCTV camera
Power In/Output: 18-30VDC/ 4-20 mA, RS485 Modbus RTU, MX loop, relays, video output optional
Approvals: ATEX • CE • IECEx • EN-54 • MED • FM • SIL2 pending
Model X40
Integrated Alarm and Control System

// 8 or 32 Channel Capacity
// Wired or Distributed I/O and SmartWireless Capable

Model X40 is designed to monitor gas detection sensors and a wide range of other field devices. It functions as a Modbus™ master and can be expanded based on application needs using Detcon’s stackable I/O modules. The X40 is field programmable using a small handheld magnet and includes extensive event data logging.

Modules for Distributed I/O: 4-20 mA input, 4-20 mA output, relay output, relay contact input
Input/Output: RS-485 Modbus RTU, 4-20 mA, relays, wireless option
Power In: 11.5-30 VDC, 115-230 VAC option for Model X40-32-N7 (NEMA 7 version)
Classification Options: NEMA 1 panel mount, NEMA 4X fiberglass or stainless steel, NEMA7
Approvals: CE Marking (Models X40-N4X & X40-SS)

MCX-32
Integrated Alarm and Control System

// Up to 64 Channel Capacity
// Wired or Distributed I/O and SmartWireless Capable

MCX-32 can receive inputs from a wide range of field devices. Standard serial protocol is RS-485 Modbus RTU and is expandable using din rail mountable I/O modules which can significantly reduce wiring and installation costs. Features include “auto-configuration” of addressable devices that are located in a device library, touch screen, compact flash for data logging and Ethernet port for remote monitoring.

Input/Output: 4-20 mA, RS-485 Modbus RTU, relays, wireless option
Power In: 20-30 VDC, 110-230 VAC
Classification Options: NEMA 1 panel mount or rack mount, NEMA 4X fiberglass or stainless steel
Approvals: Customs Union • ABS

Model 10 & 12
Single Sensor Control Card Systems

// Superior Safety Through Modular Redundancy
// 2 to 16 Channel Packaging

Models 10 and 12 control cards are capable of supervising a single field device, displaying current status and providing discrete alarm relay outputs for each channel. Model 10C features two alarm relays and a four-character display with scrolling operator interface, and range of detection programmable from 1.00 to 9999 (ppm, %, ppb). Model 12B features three alarm relays, three-character display, and range of detection programmable from 1.00 to 999.

Input/Output: 4-20 mA, RS-485 Modbus RTU, relays, dry contact
Power In: 24 VDC, and 85-264 VAC (for NEMA 4X versions)
Classification Options: NEMA 1 panel & rack mount, NEMA 4X fiberglass or stainless steel, NEMA7
Approvals: Customs Union • ABS
MX43
Analog and Digital Controller

/// Up to 32 Channels via RS-485 Modbus RTU or 4-20 mA
/// USB for Data Logging and Automated Backup of Configuration and Firmware

MX 43 is a flexible, fully scalable, easy to use control system that allows up to 32 detectors to be distributed on 8 lines for increased cost savings. MX 43 is SIL1 reliable. The COM 43 application makes programming fast and easy on a PC allowing the user to choose devices from a pre-programmed library which can then be transferred to the MX43 via USB.

Input/Output: 4-20 mA, RS-485 Modbus RTU, relays (up to 32), logic input
Power In: 21-28 VDC, 100-240 VAC, optional on-board battery backup
Classification Options: IP55 (wall-mounted), IP31 (rack)
Approvals: ATEX • CE • SIL1 • CSA pending • EAC • MED (except rack version)

MX62
Modular Controller

/// 64 Secure Channels per System
/// SIL3 Compliant - Redundant Processor Ensures Continual Measurement

MX62 is a modular gas and flame detection system that can monitor up to 64 channels per console. The system offers the high level of security required by SIL3. The heart of the system is the CPU module containing dual processors. The LED modules provide 64 channels with 6 alarms per channel. An LCD Module provides a graphical display.

Input/Output: RS-485 Modbus RTU, 4-20 mA, relays (up to 128)
Power In: 24 VDC (others by request)
Approvals: ATEX • CE • SIL3 • EAC

MX15
Single Channel Controller

/// Cost Effective Monitor for Light Industrial Applications
/// Compatible with Toxic & Flammable Gas Detectors

MX 15 is a single channel controller designed for use in boiler rooms and commercial applications. The MX 15 is low cost, easy to operate, and includes three built in relays. The din rail mountable enclosure is easy to install and is rated IP31.

Input/Output: Wheatstone Bridge and 4-20 mA/ 2 alarm and 1 fault relays
Power In: 21-30 VDC, 115 or 230 VAC
Indicators: LEDs for power, alarm 1, alarm 2, and fault
Approvals: ATEX • CE

MX32
Two Channel Controller

/// One or Two Channel Operation
/// Simple Keypad Programming

The MX 32 is compatible with a wide range of toxic and combustible fixed gas detectors. Easy to install and operate, the wall or din rail mountable enclosure includes a protected front plate and is rated IP65.

Input/Output: 4-20 mA, Wheatstone bridge, flame/ 2 alarm relays per channel and 1 fault
Power In: 24 VDC, 115 or 230 VAC
Indicators: LEDs for power, alarm 1, alarm 2, and fault for each channel, audible buzzer
Approvals: ATEX • CE
AV1/AV2-N4X

NEMA 4X Alarm Stations
// Designed for Use in Non-Hazardous Environments
// Rugged Construction and Easy Mounting

AV1-N4X & AV2-N4X audio visual alarm stations are designed for use in light industrial non-hazardous environments where a very bright visual and high decibel alarm signal is required. The audible alarm is capable of producing coded blasts or sustained tones. AV1 consists of a single strobe and horn. The AV2 includes an additional horn.

Approvals: 4UL • CUL • CSA • CE (strobe only); UL • CUL • CSA • FM (VAC horn only), UL • CUL • ULC • CSFM (VDC horn only)
Power Options: 12 VDC, 24 VDC, 120 VAC or 240 VAC
Dome Colors: amber, blue, clear, green, or red
Horn/Strobe: 99dbA @ 10 feet/ 1.75 joules per flash, 60-80 fpm

AV1/AV2 C1Dx

Hazardous Area Alarm Stations
// Designed for Use in Hazardous Environments
// Optional Class I, Div 1 and Class I, Div 2

AV1/AV2-C1Dx audio visual alarm stations are designed for installation and use in heavy industrial areas. The alarm stations consist of a warning light (2 lights for AV2) and a siren and are suitable for hazardous locations or corrosive environments. Horn options include coded blast, sustained tone and multi-tone.

Approvals (horn & strobe only): UL • cUL (CSA option depending on model)
Power Options: 24 VDC, 120 VAC or 240 VAC
Dome Colors: amber, blue, clear, green, red or magenta
Horn/Strobe Options: coded blasts, sustained tones, multi-tones/ 98-100 dB @ 10 ft, 80-85 flashes per minute

Alarm Bar

Audio/Visual Alarm Station
// Dual or Quad Strobe Options
// Designed for Use with the Site Sentinel, Pipe or Wall Mountable

Alarm Bar is designed for use in industrial environments where a very bright visual and high decibel alarm signal is required. It is available in a dual strobe or quad strobe configuration. The horn and strobes meet NEMA 4X watertight, dust-tight requirements and are rated Class 1, Div 2. They are packaged in a NEMA 4X rain tight enclosure.

Strobe Color Options: amber, blue, clear, green, purple and red
Alarms: audible up to 125 dB @ 1 meter (28 selectable tones), 1.9 joules xenon strobe 60-80 fpm
Power Input: 12-48 VDC
Approvals: ATEX • CE • IECEx (horn only); CSA,UL (strobe only)
Wireless Technology

CXT

SmartWireless Gas Detector

// Proprietary Self-Healing Mesh Network Topology
// Battery Powered Devices Eliminate Expensive Installation Costs

CXT gas detectors are easily and economically deployable in both permanent and temporary installations. Rechargeable and disposable battery options allow for run times of up to 9 months and indefinitely with solar power options. Features include 1.5 mile (2.4 km) line-of-site, no single point of failure and a network capacity of up to 32 devices.

Gases Detected: toxic, combustible, O2
Sensor Technologies: electrochemical, infrared
Power In/Battery Life: 9-30VDC/ 2 months "C" cell (3.6V) disposables, 9 months "D" cell (3.6V) disposables, 5 months rechargeable pack
Input/Output: 2.4Ghz DSSS Radio Transmission
Approvals: ATEX* • CE* • cCSAus • IECx*

* C-Cell Battery Pack Version Only

CX

Low Power Wired Gas Detector

// Compatible with Site Sentinel CX/CXT Controllers and other Control Systems
// Fully Encapsulated Electronics & Electropolished 316SS Construction

CX is the wired version of the CXT. It can be economically and easily deployed within a wireless system where a wireless transmitter is not needed. The CX is a very low power device making it an ideal choice for a battery powered detector (optional) in applications where power is unavailable or not economically feasible.

Gases Detected: toxic, combustible, O2
Sensor Technologies: electrochemical, infrared
Power In/Battery Life: 9-30VDC/ Internal "D" cell (3.6V) disposable pack or Lithium Ion Rechargeable pack optional
Input/Output: 4-20mA, RS485 Modbus RTU, relays (optional)
Approvals: ATEX • CE • cCSAus • IECx

Site Sentinel CXT

SmartWireless Alarm and Control System

// Compatible with CX/CXT Gas Detectors and SmartWireless Alarm Systems
// Command Functions Include Alarm Reset, Acknowledge, Test & Radio Silence

Site Sentinel CXT Controller is a SmartWireless gas detection and control system that provides operator interface to the network and real time status display of all network devices. Features include 1.5 mile (2.4 km) line-of-site, network capacity of up to 32 devices including 4 wired, optional audible and visual alarms, non intrusive magnetic interface and solar power options. Rated for Class 1, Division 2 environments.

Power In/Battery Life: 14-30VDC and/or internal rechargeable (1-2 months operating time)
Input/Output: 2.4Ghz DSSS radio transmission, 4-20mA wired device inputs
Alarms (optional): xenon strobe lamp, 1.75 joules, 60-80 fpm; 80-90 dB audible min @ 2 ft
Approvals: CE • cMETus

* Model X40 and MCKX2 are also available in wireless versions
Site Sentinel CX

SmartWireless Sensor Station

// Accommodates Up to 4 Wired SmartWireless CX Gas Detectors
// CX Sensors are Powered by the CX Sensor Station Internal Battery

SmartWireless Site Sentinel CX Sensor Station is an accessory to the Site Sentinel CXT and is easily and economically deployable in both permanent and temporary installations. The CX wirelessly transmits the data from up to 4 wired CX gas detectors back to the CXT. Features include 1.5 mile (2.4 km) line-of-site, optional audible & visual alarms, and solar power option. Rated for Class 1, Division 2 environments.

Power In/Battery Life: 14-30VDC and/or internal rechargeable (1-2 months operating time)
Input/Output: 2.4Ghz DSSS radio transmission, 4-20mA wired device inputs
Alarms (optional): xenon strobe lamp, 1.75 joules, 60-80 fpm; 80-90 dB audible min @ 2 ft
Approvals: CE • cMETus

Log File Viewer

SmartWireless Data Logging Software

// Advanced Catalog Viewing System
// Date, Channel, Alarms Events, Com Errors, Cal Cycles, & TLV-TWA/Peak Readings

Log File Viewer is designed for use with the Site Sentinel, X40 and MCX-32 controllers. The software allows gas sensor information that is recorded by the controller to be stored on a secure digital memory card that can then be uploaded and viewed on a PC, laptop or tablet. Log File Viewer displays detailed sensor information in an easy-to-read chart format that can be examined by date, individual channel, or by event to include alarms, communication errors, calibration cycles, and TLV-TWA/Peak readings.

SmartWireless Batteries

Rechargeable & Disposable Battery Options

// Industry Leading Run Times
// High Energy Lithium Ion Technology

High energy battery packs are a necessary component in the application of any SmartWireless® gas detection system. All battery packs use lithium ion technology. Paired with a solar charging option SmartWireless components can provide indefinite run times. The battery packs are packaged as plug in modules and are housed and secured inside a Division 1 enclosure. A 4-pack charging station is also available.

Available Options: rechargeable, high capacity rechargeable, “C” (3.6V) cell replaceable, “D” (3.6V) cell replaceable
Battery Life*: CXT gas detectors 2-9 months, audio/visual alarms 5-6 1/2 months (4-9 hours full alarm)
Safety Circuitry: discharge over-current, low voltage and over-voltage
Approvals: cCSAus

* typical depending on battery pack used

SW-AV Series Alarms

Audio/Visual Alarm Stations

// Up to 6 1/2 months continuous operation - no alarm
// Up to 9 hours continuous operation in full alarm

SmartWireless® audio-visual alarm stations are easily and economically deployable in both permanent and temporary installations. Relay options include adjustable set points and latching/non-latching. The audible can be configured for acknowledge/silence. Both are configured via operator interface at the SmartWireless CXT Controller. Available in Class I, Div 2 and Class I, Div 1 packages.

Available Models: single audible & visual, single audible & dual visual (Div 2), single audible & visual (Div 1)
Alarms: intense light LED array, 108-115 dB (Div 2 versions); 5 joules, 110 dB @ 1m (Div 1 version)
Battery Life*: 5-6 1/2 months no alarms, 4-9 hours full alarm, indefinite with solar option
Input/Output: 6-30VDC or battery pack/ 2.4Ghz DSSS radio transmission

* typical depending on battery pack used
Alarm Bar

Audio/Visual Alarm Station

// Dual or Quad Strobe Options
// Designed for Use with the Site Sentinel, Pipe or Wall Mountable

Alarm Bar is designed for use in industrial environments where a very bright visual and high decibel alarm signal is required. It is available in a dual strobe or quad strobe configuration. The horn and strobes meet NEMA 4X watertight, dust-tight requirements and are rated Class 1, Div 2. They are packaged in a NEMA 4X rain tight enclosure.

Strobe Color Options: amber, blue, clear, green, purple and red
Alarms: audible up to 125 dB @ 1 meter (28 selectable tones), 1.9 joules xenon strobe 60-80 fpm
Power Input: 12-48 VDC
Approvals: ATEX • CE • IECEx (horn only); CSA,UL (strobe only)

Network Configuration Tablet

Fault Tolerant Safety Network Configurator

// Interfaces with a USB Wireless Radio

The SmartWireless Network Configuration Tablet is used to configure the proprietary Fault Tolerant Safety Network. In the Fault Tolerant Safety Network data processing capability is embedded in each device in the network, guaranteeing that no single point of failure will interrupt communication between devices. Therefore, if the master device fails the network automatically elects another device to take over as master. This feature significantly enhances the redundancy and overall safety level of the wireless system.

Power Input/Battery Life: 100-240VAC power adapter, 8 hour battery operation
Display: 10.1", 1366 x 768 pixel, LED backlit, dual bonded, touchscreen or active stylus

OverWatch

Remote Monitor

// Web Browser Access to Real Time Data
// Automated Emails on Alarm and Fault Conditions

OverWatch provides remote access to gas detection systems via Ethernet or cellular communication. It is compatible with the Model X40, MCX-32 and Site Sentinel SmartWireless controllers. Web page data includes: detector type, serial number, location/name, gas concentration, gas type and alarm status. When used with SmartWireless systems, the data includes battery life and link quality of all devices in the network.

Encryption: strong SSL/TLS-based encryption ensures security
Power Input: 115-230 VAC
Input/Output: RS-485 Modbus RTU, ethernet, cellular

SPS-00W-DVx Series

12V Solar Power Panels

// Class I, Div 1 and Class I, Div 2 Options
// 1.5 Watt, 5 Watt, 10 Watt, 20 Watt & 40 Watt Options

Solar power panels are ideal for providing indefinite run-times for the full range of battery powered SmartWireless field devices. Five choices in power output are available ranging from 1.5 watt to 40 watts and are stackable to create higher output arrays as needed. SmartWireless battery powered devices have pre-engineered circuitry that allows direct connection to solar power panels without the need for solar power controllers and regulators.
**Model 1000 Series**

Single or Dual Gas Analyzers

- Class I, Div 1, Groups B,C,D
- H2S Low Range, H2S High Range, CO2, H2S & CO2 Versions

Model 1000 Series gas analyzers provide accurate and continuous measurement of target gases in natural gas treating plants, gas production wells and at custody transfer points along gas transmission pipelines. Model 1000 is field tested and proven offering capabilities of analyzer technologies costing much more.

**Operating Pressure:** inlet 10 ±2 psig, vent atmospheric ±1 psig
**Sensor Technologies:** electrochemical for H2S, infrared for CO2
**Measurement Range:** 0-10ppm up to 0-5% for H2S, 0-0.3% up to 100% for CO2
**Power In/Output:** 18-36VDC, 117-220 VAC/ 4-20 mA, RS485 Modbus RTU, relays

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**Model P-1000 Series**

Portable H2S Gas Analyzers

- NEMA 4X, IP66, Intrinsically Safe
- Data Logger Downloads Spreadsheet for Trend, Average and Peak Values

P-1000 is designed to provide accurate measurement of H2S gas in natural gas treating plants, production wells, and at custody transfer points along gas transmission pipelines. It utilizes advanced electrochemical sensor technology, microprocessor based electronic control circuitry and includes a built-in data logger.

**Battery Life:** 30 days continuous operation
**Sensor Technologies:** electrochemical
**Measurement Range Options:** 0-20ppm, 0-100 ppm, 0-1,000 ppm
**Power In/Output:** internal 12 VDC battery, 120 VAC charger/ USB port for data logger
Oldham provides custom engineered gas detection systems from design concept to installation and commissioning offering a complete end-to-end solution for many industrial and commercial applications. Each custom engineered system is tailored to meet the specific application needs of a project and are designed to ensure regulatory compliance in order to protect lives and workplaces around the world.

iES (“Integrated and Engineered Solutions”) is based on advanced technology and the expertise of a global network of professionals who are involved at each stage of the project. With more than 50 years of combined experience, the engineering team provides consultation on regulations, hazards, and applications, while delivering system specifications, custom design and integration. Many iES team members are multi-lingual and all are knowledgeable on the certifications and requirements of countries around the World.

**Systems and Custom Solutions**

**iES “Integrated and Engineered Solutions”**

In-House Capability to Assess Hazardous Environments Anywhere in the World

- Proprietary Self-Healing Mesh Network Topology
- Battery Powered Devices Eliminate Expensive Installation Costs

MultiSafe-MX Integrated Fire & Gas System

Multisafe-MX control panel is a fully integrated SIL2/SIL3 certified fire and gas detection, fire suppression and intruder alarm system. The integrated fire and gas system offers a large choice of configurations and satisfies the requirements of many industrial sites. Dedicated cards determine system performance requirements. The Multisafe-MX is intended for the protection of high hazard, high-risk plants and facilities.

The SYNTEL System

Syntel integrates a wide range of hazardous area devices on a secure, fault tolerant addressable network. Standard and client specific HMI’s are available along with communication interfaces to third party systems. Syntel does not have a CPU, so there is no common point of failure. Syntel stores alarm and calibration information in distributed non-volatile memory, hence there is no reliance on a centralized system. Syntel is ideal for future expansion.
Protégé Multigas

Four Gas Personal Monitor

// Masterdock One-touch Calibration (Accessory)
// One-Button Turn On, Functional Self-Testing and Simple Sensor Replacement

Protégé provides simple, intuitive user operation and is designed to monitor combustible gases, O2, CO, and H2S. Protégé software allows users to set parameters that are specific for their workplace, and has significant data logging capabilities. Automated maintenance features reduce cost and time associated with training and maintenance.

Gases Detected: LEL, H2S, O2, CO
Sensor Technologies: electrochemical, catalytic
Run Time: 18 hours without pump, 12 hours with pump
Alarms: 90 dB audible, wide-angle dual red LED alarm bars, vibrating
Approvals: ATEX • CE • IECEx pending • CSA • UL • INMETRO • EMC • IP67

PS200
Up to Four Gas Personal Monitor

// Auto Bump and Calibration Station (Accessory)
// Optional Internal Pump and Easy One Button Operation

PS200 provides unrivaled protection in confined space applications. Monitoring up to 4 gases simultaneously, it can be configured to detect a combination of Methane, Oxygen, Carbon Monoxide, and Hydrogen Sulfide, as well as other flammable gases. An optional internal pump allows for pre-entry checking.

Gases Detected: LEL, H2S, O2, CO
Sensor Technologies: electrochemical, catalytic
Run Time: 14 hours, 8 hours (pumped)
Alarms: highly visible flashing LED, piercing >90dB audible
Approvals: ATEX • CE • IECEx • cCSAus • MED

PS500
Up to Five Gas Personal Monitor

// Auto Bump and Calibration Station (Accessory)
// Over 15 Plug-&-Play Smart Sensors to Choose From Including PID for VOCs

PS500 can be tailored to detect up to five gases and is particularly useful in noisy environments, featuring a piercing 95dB alarm. An optional internal pump allows for pre-entry checking. PS500 features a high-impact resistance case and on-board data logging for calibration certificates, data management and event logging.

Gases Detected: LEL, H2S, O2, CO, CO2, SO2, CL2, NH3, NO, NO2, PH3, VOC, C6H6, dual tox CO/H2S
Sensor Technologies: electrochemical, catalytic, PID, NDIR
Run Time: 12 hours min with pump - rechargeable NiMH or 3 AA alkaline
Alarms: visual 360° light bar, piercing 95 dB audible, TWA, STEL, low battery
Approvals: ATEX • CE • IECEx • UL • MED
## GT

1 Instrument, 7 Applications

- Auto Bump and Calibration Station (Accessory)
- Leak detection from PPM to Volume gas

GT Series is designed for the gas industry, satisfying all the needs of service technicians within a single unit. Seven modes of operation include: leak test, confined space entry, borehole testing, carbon monoxide, purge, sniffer and pressure leak tightness. Features include data logging, integral flash light and geiger on ppm range.

**Gases Detected:** O2, CO, H2S, dual tox CO/H2S, methane (ppm, LEL, % Volume), water gauge

**Sensor Technologies:** electrochemical, catalytic, semiconductor, thermal conductivity, pressure transducer

**Battery Life:** 8 hours: 3 ‘C’ type batteries – LR14 alkaline or rechargeable

**Alarms:** high visibility LEDs, 85 dB audible

**Approvals:** ATEX • CE • IECEx • CSA • UL

## Protégé ZM

Zero Maintenance Single Gas Personal Monitor

- No Charging or Calibration Required
- Display Shows Life Remaining, Gas Readings or Both

Protégé ZM is an easy-to-use, zero-maintenance gas detection solution that delivers high performance in a small package. Once activated, the Protégé ZM monitor will operate for two years, maintenance and hassle free. Additional features include user configurable alarm set points, bump & calibration reminders and data logging.

**Gases Detected:** H2S, O2, CO

**Sensor Technologies:** electrochemical

**Run Time:** 2 years; hibernate mode extends life up to one year on CO and H2S

**Alarms:** 95 dB audible, red LED visual, vibrating

**Approvals:** ATEX • CE • IECEx • CSA • INMETRO • EAC • IP66/67

## PS1

Single Gas Personal Monitor

- Auto Bump and Calibration Station (Accessory)
- On/Off Capability and Easy One Button Operation

PS1 is a rugged, lightweight single gas monitor that clips easily onto a collar or vest putting the instrument near the breathing zone for maximum user protection. Additional features include fully programmable alarms data logging, TWA, STEL, low battery and end of life.

**Gases Detected:** H2S, O2, CO, SO2

**Sensor Technologies:** electrochemical

**Run Time:** 2 years

**Alarms:** visual 360° light bar, vibrating, audible 95 dB, TWA, STEL, low battery

**Approvals:** ATEX • CE • IECEx • CSA • UL • MED

## Gasurveyor 500

Gas Industry Standard Portable Monitor

- Auto Bump and Calibration Station (Accessory)
- Multiple Modes Including: Combustible Gas Indicator/ Confined Space Monitor/Purge/Sweep

Offering highly accurate and reliable instrumentation in an extremely robust, anti-static case, the Gasurveyor 500 Series measures combustible gases (ppm, %LEL, %Vol) in many applications and optionally O2, CO and H2S. Features include configurable operation, auto ranging, internal sample pump and data logging.

**Gases Detected:** CO, H2S, combustible (ppm, %LEL, % Volume), O2

**Sensor Technologies:** electrochemical, catalytic, semiconductor, thermal conductivity

**Battery Life:** 15 hours 4 ‘D’ size alkaline or 9 hours rechargeable battery pack

**Alarms:** highly visible flashing LED, typically 85dB audible @ 1m

**Approvals:** ATEX • CE • IECEx • CSA • UL
BM 25/ BM 25 W

Up to 5 Gas Transportable Monitor (with Wireless Option)

- Network up to 30 Wireless Devices (up to 1 km/.62 Mile Line of Sight)
- Intrinsically Safe Trickie Charger For Long-Term Monitoring In Classified Zones

BM 25 is ideal for mobile or temporary work applications, team protection, area surveillance or locations where fixed detection systems are not suitable. Features include STEL and TWA values, data logging of four months or more and is compatible with the MX 40 controller.

Gases Detected: toxic, combustible, O2, CO2, Isobutylene
Sensor Technologies: electrochemical, catalytic, infrared, PID
Battery Life: NiMH up to 170 hours operating time, 135 hours in wireless mode
Alarms: ultra bright LED beacon visible 360 degrees, 103 dB @ 1 meter, relays
Approvals: ATEX • CE • IECEx • CSA • INMETRO • EAC

flexiCal Plus
Test and Calibration Software

- Automatic or Manual Calibration
- Results Storage
- Instrument History
- Report Generation
- Internet Updates
- Display Real Time Results
- Gas Cylinder Tracking
- Generation of Cal Certificates
- Digital Signatures

FlexiCal Plus is a Windows™ based software package that allows customers to Test and Calibrate GMI’s full range of portable instruments (PS1, PS200, PS500, GT Series, Gasurveyor) to comply with relevant legislation. All GMI portable instruments have two-way communications and the FlexiCal software can be configured to test and calibrate either manually or automatically. The user can specify parameters such as gas type, concentration and pass or fail criteria. Results are stored automatically on a PC or laptop. A test/cal certificate can then be produced after successful completion if required.

flexiCal IMS
Instrument Management System Software

- Automatic Calibration and Data Collection
- Issue Reminders Automatically When Calibration is Due
- Maintain Calibration Records Securely
- Generate Reports on Instrument Fleet Status

Instrument Management System (IMS) is a Microsoft Windows™ based software package used to automate the management of multiple GMI portable gas detectors. IMS helps ensure that the GMI portable instruments remain usable in field operations for as long as possible, knowing that they are functioning correctly without returning them to the workshop for routine checks. IMS provides System Managers with useful information on instruments including those that are overdue for testing or instruments that have not been successfully tested.

Protégé
Custom Configuration Software

- Alarm Set Points, Latching and Silence
- Backlight Timer, Auto On/Off and Delay
- Calibration Due Dates
- No Push-Button Navigation
- Password Protection from Unauthorized Changes
- Log Archiving In Simple Excel® Format

Protégé ships preconfigured and ready for operation using factory default settings. The Protégé multi-gas monitor software allows users to set parameters that are specific to their workplace and has significant data logging capabilities. The software uses a PC interface and is Windows® compatible (2000, XP, Vista®, 7 (32-bit).
Global

Gas & Flame Detection Products