

# Combustible and Toxic Gas Detection Solutions

Performance and Safety  
Beyond Compliance



# Reliable Solutions from Det-Tronics, Your Partner in Safety



Our proven hazardous gas detection systems deliver the highest level of protection for people, processes and property—even under the most extreme conditions.

- ▲ Rock-solid, performance-tested detectors for a wide variety of gas hazards – all with global approvals
- ▲ Durable, integrated solutions for protection of people and critical industrial applications
- ▲ We partner with customers to design, manufacture, test and deliver complete, approved safety systems

## Multiple Layers of Detection

### LINE-OF-SIGHT GAS DETECTION —●—

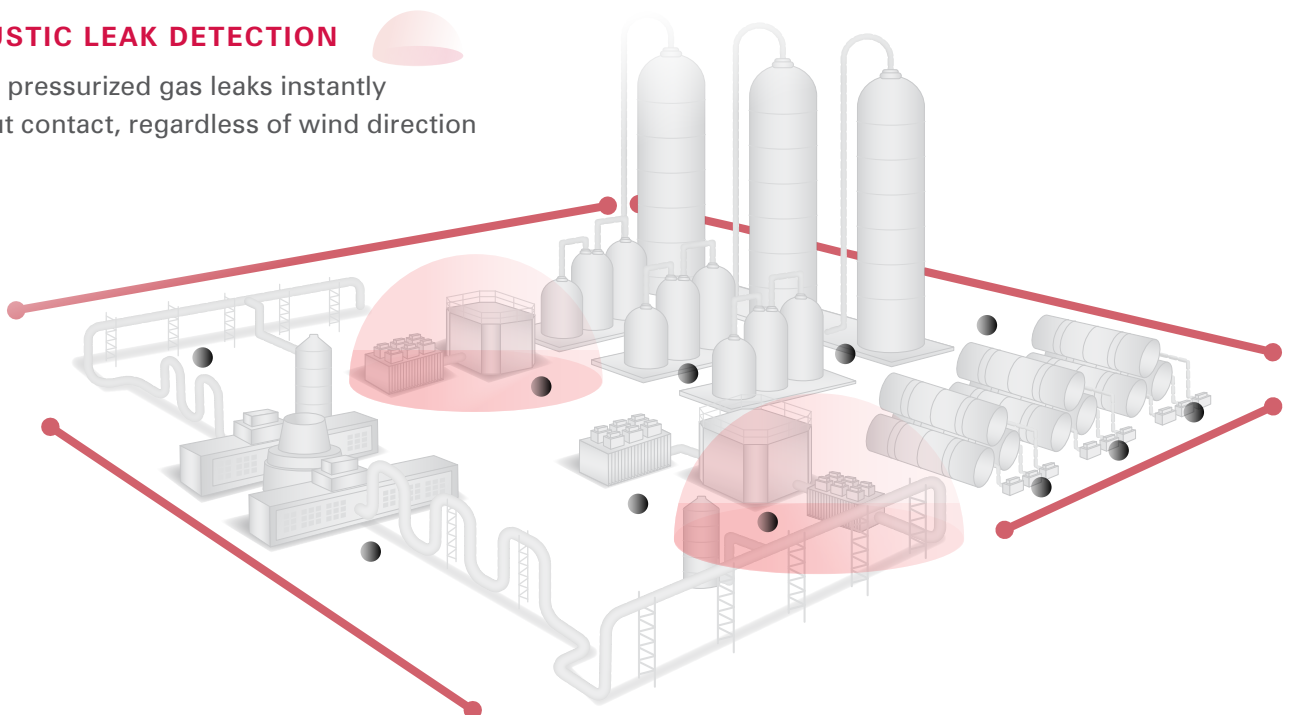
Detect combustible gas between two points up to 120 meters apart with infrared technology

### POINT GAS DETECTION ●

Detect toxic or combustible gases using electrochemical, catalytic, infrared or NTMOS technology

### ACOUSTIC LEAK DETECTION ●

Detect pressurized gas leaks instantly without contact, regardless of wind direction



# Trusted Response with the Utmost Confidence



Det-Tronics leads the industry with performance-tested hazardous gas detection solutions that perform optimally with minimal maintenance.

- ▲ Certified SIL 2 Capable solutions to streamline safety system design and provide maximum reliability
- ▲ Performance tested in third-party labs to validate response and accuracy
- ▲ Extra global approvals to ensure optimal safety and protection

- 1 Heated to improve operation in cold or damp environments
- 2 Junction box designed to reduce installation cost
- 3 Local display to provide confidence that you are being protected
- 4 Special versions available that support easy integration with the Eagle Quantum Premier Safety System
- 5 Certified SIL 2 Capable to integrate into high availability safety systems
- 6 Approved to install without conduit seals to reduce installation cost
- 7 Rugged-weather baffles for best-in-class protection
- 8 HART communication for comprehensive diagnostic information



**HART**  
COMMUNICATION PROTOCOL



FlexVu® Universal Display



GT3000 Electrochemical  
Toxic Gas Detector



Pointwatch Eclipse® Infrared  
Hydrocarbon Gas Detector



# Combustible Gas Detection



## **POINTWATCH ECLIPSE® INFRARED HYDROCARBON GAS DETECTOR**

- ▲ Certified to detect methane, propane, ethylene and butane
- ▲ Proven infrared technology to detect and communicate gas leaks
- ▲ Rugged IP66/67 construction and extended interval testing reduces maintenance



## **CGS CATALYTIC BEAD SENSOR**

- ▲ Best sensor for high temperature and hydrogen detection applications
- ▲ Cost-effective solution to detect a broad range of combustible gases
- ▲ Rugged, stainless steel construction



## **OPECL INFRARED LINE OF SIGHT HYDROCARBON GAS DETECTOR**

- ▲ Monitors up to 120m with a projected beam
- ▲ Reduced installation and maintenance costs over multiple gas detectors
- ▲ HART communications for simplified maintenance



# Toxic Gas Detection



## GT3000 ELECTROCHEMICAL TOXIC GAS DETECTOR

- ▲ Detects hydrogen sulfide, hydrogen, oxygen, carbon monoxide, nitrogen dioxide, ammonia, chlorine and sulfur dioxide
- ▲ Certified SIL 2 Capable oxygen and hydrogen sensors
- ▲ Simple, one-person calibration

## COMBUSTIBLE AND TOXIC GAS DETECTION

### FLEXSONIC™ ACOUSTIC LEAK DETECTOR

- ▲ Detects instantly; no contact with gas required
- ▲ Sensitivity unaffected by wind direction or leak location
- ▲ Performs automatic integrity checks

### NTMOS HYDROGEN SULFIDE DETECTOR

- ▲ ISA-compliant and IP66/67 rated for dust and water protection
- ▲ Ideal for extreme temperature and humidity levels
- ▲ Provides incredibly fast response when every second counts



### POINTWATCH ECLIPSE® INFRARED CARBON DIOXIDE GAS DETECTOR

- ▲ Quickly detects hazardous levels of carbon dioxide
- ▲ Tri-color LED provides local status indication and improves maintenance
- ▲ Proven performance



# Benefit from Universal Display and Unparalleled Control



## FLEXVU® UNIVERSAL DISPLAY

- ▲ Reduces parts inventory and manpower; lowers risk
- ▲ Non-intrusive, one-person calibration
- ▲ Approved to trigger life-safety horns and alarms
- ▲ Loop-powered options for easy integration



## EAGLE QUANTUM PREMIER® (EQP) SAFETY SYSTEM

- ▲ Combines gas and flame detection and extinguishing flame release in a single integrated solution
- ▲ Certified SIL 2 Capable
- ▲ NFPA 72 and EN 54 compliant
- ▲ Redundant, fault-tolerant loop reduces installation costs



## ACCESSORIES

- ▲ Application specific to meet customer requirements
- ▲ Duct mounts, junction boxes, calibration kits and more
- ▲ Single source, with highest-quality products and support

# Select from Proven Products to Meet Your Safety Needs

				A	B	C	D	E	F	G	H	I	J	K
				PERFORMANCE CERTIFIED	EVENT HISTORIAN	CERTIFIED SIL 2 CAPABLE	HEATED SENSOR OR DISPLAY	IP RATING	ANALOG 4-20 mA	HART DIGITAL	RELAYS	EQP/LON	DIGITAL MODBUS RTU	LOOP POWERED
COMBUSTIBLE GAS	PointWatch Eclipse®	Hydrocarbons (not hydrogen)	-40 to +75C	▲	▲	▲	▲	66/67	▲	▲	▲	▲	▲	
	CGS Catalytic Bead Sensor	Wide range of combustible gases (hydrogen)	-55 to +75C	▲	●		●	53	●	●	●	●	●	
	Model OPECL IR Line of Sight	Hydrocarbons (not hydrogen)	-40 to +60C	▲	▲	▲	▲	66/67	▲	▲	▲	▲	▲	
TOXIC GAS	GT3000	H <sub>2</sub> S, CO, O <sub>2</sub> , NH <sub>3</sub> , Cl <sub>2</sub> , SO <sub>2</sub> , H <sub>2</sub> , NO <sub>2</sub>	-40 to +50C	▲	▲	▲		66/67	▲	▲	●	●	●	▲
	Eclipse CO <sub>2</sub>	CO <sub>2</sub>	-40 to +75C		▲		▲	66/67	▲	▲	▲	●	▲	
	NTMOS	H <sub>2</sub> S	-40 to +65C	▲	●			66/67	▲	●	●	●	●	
ACOUSTIC LEAK	FlexSonic™	Any gas	-55 to +75C	▲	▲	▲		66	▲	▲	●	●	●	
UNIVERSAL DISPLAYS	FlexVu® UD10	–	-55 to +75C	▲	▲	▲	▲	66/67	▲	▲	▲	▲	▲	
	FlexVu® UD20	–	-55 to +75C	▲	▲	▲		66/67	▲	▲				▲

● Additional capabilities when integrated with the FlexVu UD10 Universal Display

- A Performance Certified:** Outside laboratories independently validate Det-Tronics accuracy across the temperature range.
- B Event Historian:** Most sensors maintain calibration logs and usage history. When combined with UD10, additional diagnostic information is maintained like alarm events and faults like failed calibration or loss of power.
- C Certified SIL 2 Capable:** Det-Tronics uses exida to verify and certify the reliability of combustible gas and toxic gas detectors and displays.
- D Heated Sensors or Displays:** A sensor covered with condensation, rain or snow cannot detect hazards. Det-Tronics detectors are heated to operate in extreme conditions.
- E IP Rating:** Verifies that dust and water will not affect the products' operation, third-party testing and ratings are provided on all products.
- F Analog 4-20mA:** The device outputs to the most common communication method for safety systems. This method requires home run wiring topography to the controller.
- G HART Digital:** The device allows for the use of the HART handheld maintenance tool. In addition, the GT3000, UD10 and Eclipse are FDT/DTM and AMS compatible.
- H Relays:** The device has multiple relay outputs to drive local horns and alarms without the need to connect to a controller.
- I EQP/LON:** The device is compatible with Det-Tronics Eagle Quantum Premier (EQP) Safety System. The EQP uses an addressable loop, which allows customers to use multidrop wiring techniques to reduce installation costs.
- J Digital Modbus RTU:** Device outputs to an addressable loop, which allows customers to use multidrop wiring techniques to reduce installation costs.
- K Loop Powered:** A device that uses two wires for both power and signal.

# The Global Leader in Fire and Gas Safety Systems



FlexSonic™ Acoustic  
Leak Detector



X3301 Multispectrum  
IR Flame Detector



PointWatch Eclipse® IR  
Combustible Gas Detector



FlexVu® Universal Display  
with GT3000 Toxic Gas Detector



Eagle Quantum Premier®  
Safety System

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## Corporate Office

6901 West 110<sup>th</sup> Street  
Minneapolis, MN 55438 USA  
[www.det-tronics.com](http://www.det-tronics.com)

Phone: 952.946.6491  
Toll-free: 800.765.3473  
Fax: 952.829.8750  
[det-tronics@det-tronics.com](mailto:det-tronics@det-tronics.com)

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