

# Hazardous Gas Detection Solutions

Designed for Extreme Conditions—  
Performance and Safety Approved



# Your Solutions Partner

## Advanced Solutions

Det-Tronics offers a range of hazardous gas protection solutions from a single component to complete systems. Designed for protection of people, processes and property in critical industrial applications—even under the most extreme conditions. Built to minimize total cost of ownership, our gas detection solutions increase your reliability and reduce your maintenance costs.

- ▲ Designed for extreme environments
- ▲ Support multiple communication options
- ▲ Third-party performance tested and meet required certifications
- ▲ Local status reporting and non-intrusive, easy calibration



Each product is tested prior to leaving the factory

# Flexible to Your Needs



Solutions are tested before being commissioned

## Advanced Features

Det-Tronics performance tested hazardous gas detection products require minimal maintenance.

- ▲ Certified SIL 2 capable
- ▲ Third-party performance verified
- ▲ Individually tested before deployment
- ▲ Global approvals and certifications



## Advanced Layers of Detection

### POINT GAS DETECTION ●

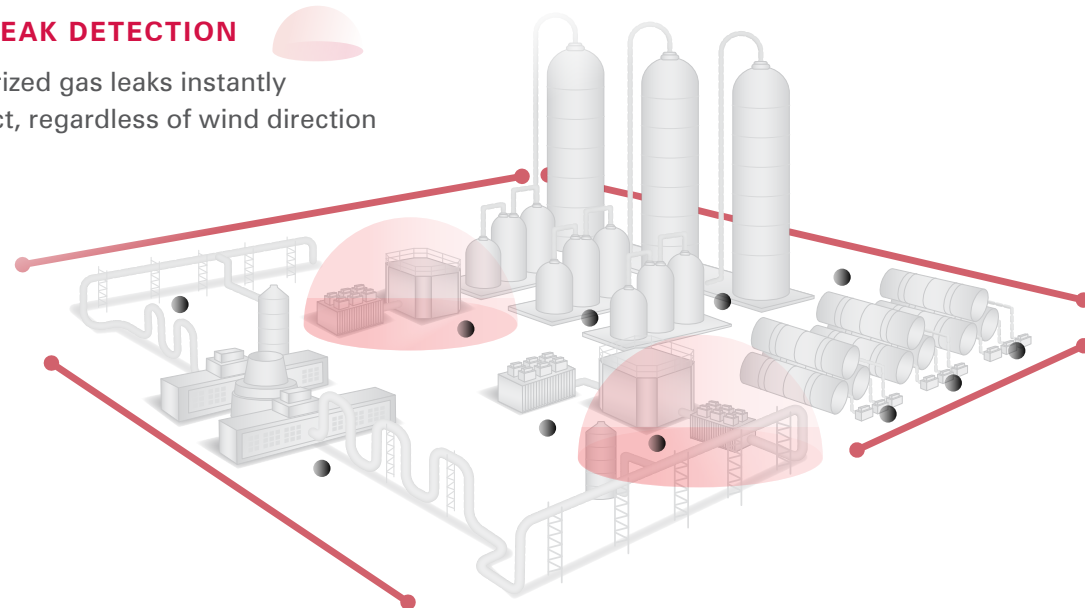
Detect toxic or combustible gases using electrochemical, catalytic, or infrared technology

### LINE-OF-SIGHT GAS DETECTION —

Continuously monitor combustible hydrocarbon gas levels between two points with infrared technology

### ACOUSTIC LEAK DETECTION ●

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



## Solutions Designed to Your Specifications

**CGS Catalytic Bead Sensor with FlexVu® UD10 Universal Display** is a cost effective solution for a range of combustible gases.

**PointWatch Eclipse® Infrared Hydrocarbon Gas Detector** with or without **FlexVu® UD10 Universal Display** offers widest functionality with leading performance.





# Key Gas Detection Products

## Point Combustible Gas Detection



### POINTWATCH ECLIPSE® INFRARED HYDROCARBON GAS DETECTOR

- ▲ **Top selling gas detector**
- ▲ Performance certified to detect methane, propane, ethylene and butane
- ▲ Rugged IP66/67 stainless steel construction and extended interval testing
- ▲ Local indication and intrinsically safe HART port; local display optional
- ▲ Global certifications (SIL 2/FM/CSA/ATEX/IECEX)
- ▲ 5-year device warranty



### 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
- ▲ Certified SIL 2 capable when used with FlexVu® UD10 Universal Display

## Point Toxic Gas Detection



### GT3000 ELECTROCHEMICAL TOXIC GAS DETECTOR

- ▲ Detects hydrogen sulfide, hydrogen, oxygen, carbon monoxide, nitrogen dioxide, ammonia, chlorine or sulfur dioxide
- ▲ Certified SIL 2 capable (oxygen and hydrogen sulfide) sensors
- ▲ Intrinsically safe sensors can be hot-swapped in the field



### POINTWATCH ECLIPSE® INFRARED CARBON DIOXIDE GAS DETECTOR

- ▲ Quickly detects hazardous levels of carbon dioxide
- ▲ Tri-color LED local status indication enables maintenance efficiency
- ▲ Proven performance
- ▲ 5-year device warranty

## Line-of-sight Detection



### FLEXSIGHT™ LS2000 LINE-OF-SIGHT INFRARED HYDROCARBON GAS DETECTOR

- ▲ Fast and easy to install, align, commission and maintain
- ▲ Wide optical field of view (0.8°), consistent signal strength, and robust housing design help meet rigorous performance standards
- ▲ Performance approved with 95% obscuration
- ▲ Ten-year IR source warranty; 5-year device warranty
- ▲ **exida safety award winner**



## Acoustic Leak Detection



### FLEXSONIC® ACOUSTIC LEAK DETECTOR

- ▲ Instantaneous response to pressurized gas leaks; no contact with gas required
- ▲ Sensitivity unaffected by wind direction or leak location
- ▲ Foam filter option for protection in dry, sandy environments
- ▲ Standard base settings useful for most applications
- ▲ Patented Learn Function customizes detection to ignore ultrasonic false alarm sources
- ▲ **exida safety award winner**

## Universal Displays



FlexVu® UD10 Universal Display

### FLEXVU® UNIVERSAL DISPLAY FAMILY

- ▲ Supports both Det-Tronics combustible and toxic gas sensors and other 4-20 mA devices
- ▲ Non-intrusive, one-person calibration, logging and diagnostics
- ▲ Easy to integrate and navigate

Model	Operating Temp. Range	PERFORMANCE CERTIFIED	EVENT HISTORIAN	CERTIFIED SIL 2 CAPABLE	HEATED LCD	IP RATING	ANALOG 4-20 mA	HART DIGITAL	EAGLE QUANTUM PREMIER® (EQP)	DIGITAL MODBUS RTU	LOOP POWERED	CONTROLLER/DISPLAY	STAINLESS STEEL BODY	ALUMINUM BODY	RELAYS
FlexVu® UD10	-55 to +75C	▲	▲	▲	▲	66/67	▲	▲	▲	▲		▲	▲	▲	▲
FlexVu® UD20	-20 to +70C	▲	▲	*		66/67	▲	▲			▲		▲	▲	

\*FlexVu® UD20 Universal Display is certified SIL 2 capable when used with the GT3000 Electrochemical Toxic Gas Detector in detecting H<sub>2</sub>S and O<sub>2</sub>

# Comprehensive Support and Expertise

# Products to Meet Your Life-safety Needs

## Eagle Quantum Premier® (EQP) Safety System



- ▲ Configurable certified gas and flame safety system with automatic releasing for pre-action and deluge
- ▲ Meets industry codes, hazardous location and third-party performance standards for gas and flame
- ▲ Certified SIL 2 capable and for marine applications
- ▲ Fault-tolerant communication loop with redundant controller capability
- ▲ Multiple communication protocols, with simple connection to HMIs
- ▲ Available preconfigured gas panel with 16 inputs for combustible and/or toxic gas detection

## Total Engineered Solutions

Our dedicated, experienced project support personnel provide services from the development of your application requirements to future maintenance and support.



## Multiple Options

	Model	Detected Gases	Operating Temp. Range	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				PERFORMANCE CERTIFIED	EVENT HISTORIAN	CERTIFIED SIL 2 CAPABLE	HEATED SENSOR OR DISPLAY	IP RATING	ANALOG 4-20 mA	HART DIGITAL	RELAYS	EQP	DIGITAL MODBUS RTU	LOOP POWERED	FAILSAFE OPERATION	SPEED OF RESPONSE T90 (SEC)	FLEXVU® UNIVERSAL DISPLAY
COMBUSTIBLE GAS	PointWatch Eclipse®	Hydrocarbons (not hydrogen)	-55 to +75C	▲	▲	▲	▲	66/67	▲	▲	▲	▲	▲	▲	▲	2.6/1.5	UD10/20
	CGS Catalytic Bead Sensor	Wide range of combustible gases (including hydrogen)	-55 to +125C	▲	●	▲	●		●	●	●	●	●			<30	UD10
	FlexSight™ LS2000 Line-of-Sight	Hydrocarbons (not hydrogen)	-55 to +75C	▲	▲	▲	▲	66/67	▲	▲	▲	▲	▲	▲	▲	2.0	UD10
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 +55C	▲	▲	▲		66/67	▲	▲	●	●	●	▲	▲	*	UD10/20
	PointWatch Eclipse® CO <sub>2</sub>	CO <sub>2</sub>	-40 to +75C		▲		▲	66/67	▲	▲	▲	●	▲	▲	▲	6.0 (T50)	UD10
ACOUSTIC LEAK	FlexSonic®	Any gas	-55 to +75C	▲	▲	▲		66	▲	▲	●	●	●	▲	▲	N/A	UD10

\*See datasheet for required specifications.

● Additional capabilities when integrated with the appropriate FlexVu® 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 a FlexVu® Universal Display, additional diagnostic information is maintained, such as alarm events and faults.
- 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:** Det-Tronics detectors have heater options for extreme conditions where condensation, rain, ice or snow are present.
- 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 loop 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.
- L Failsafe Operation:** When the device is implemented in a system, the design prevents or mitigates unsafe consequences in the event of a failure.
- M Speed of Response T90 (sec):** Verified response time. (Two numbers represent with and without hydrophobic filter, respectively).
- N Universal Display:** FlexVu® Universal Displays provide additional capabilities and local indication.

# The Global Leader in Fire and Gas Safety Systems

QUALITY // PROTECTION // SOLUTION // FLEXIBLE // FUNCTIONAL // RELIABLE // EXPERIENCED // ENGINEERED // ADVANCED



FlexSonic® Acoustic Leak Detector



X3301 Multispectrum IR Flame Detector



PointWatch Eclipse® IR Combustible Gas Detector



FlexVu® UD10 Universal Display with GT3000 Toxic Gas Detector



Eagle Quantum Premier® Safety System

92-1066-1.8

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Det-Tronics is certified to ISO 9001:2015 in all manufacturing processes.

