

# Optical Flame Detection Solutions

The Most Versatile Flame  
Detectors in the World



# The Global Leader in Flame Detection



Flame detection is the very essence of the proud legacy at Det-Tronics. Simply stated, Det-Tronics is the leading choice for flame detection around the world because of:

- ▲ **Performance**—unsurpassed excellence in total coverage, field of view and range
- ▲ **Reliability**—superior protection of people, products and property
- ▲ **Technology**—patented signal processing and precision optics support the widest spectrum of applications

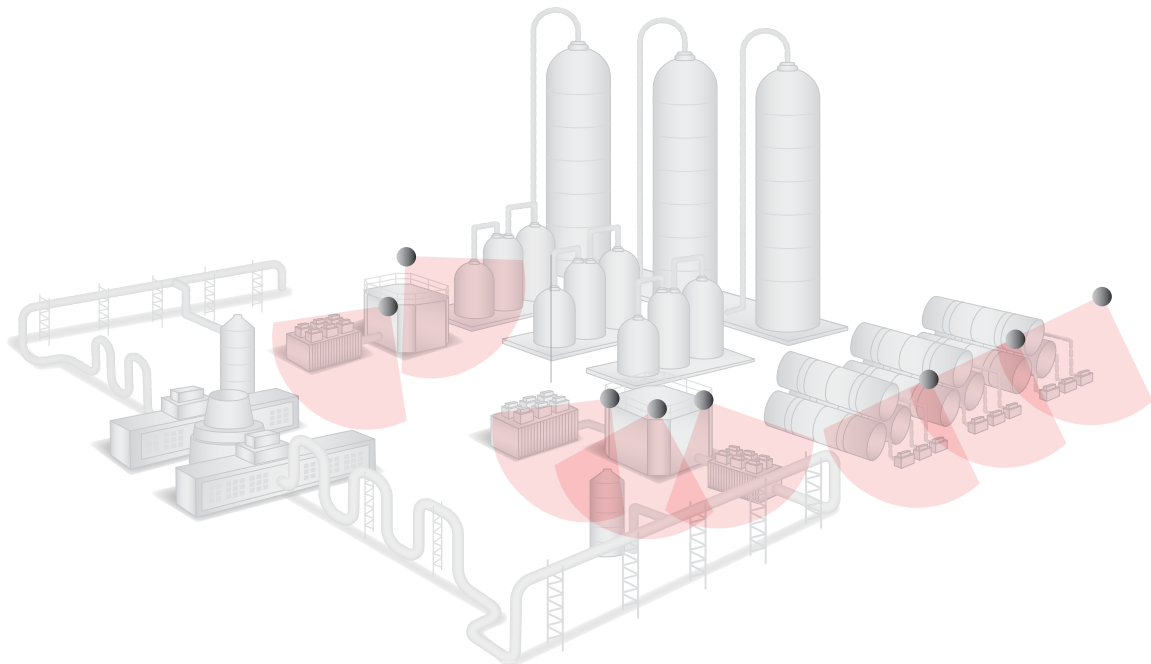
## Superior Protection

### FLAME COVERAGE

Broad field of view and range capabilities

### ADVANCED DETECTION

Detect fires using UV, UVIR, IR or MIR technology



# Superior Performance and Reliability



Det-Tronics offers advanced flame detection technologies and high-performance solutions that are:

- ▲ Certified SIL 2 Capable for safety compliance
- ▲ Performance certified to FM 3260, EN 54 and VNIPO to respond to a multitude of fuel sources
- ▲ NFPA 72 compliant LON output for safety system integration

## TESTED AND PROVEN

All detectors pass rigorous flame testing, including exposure to multiple fuel sources and at varying ranges, both on and off axis. Skilled engineers also simulate specific applications to ensure uncompromising safety and performance.

- 1 Heated optics for frigid or humid conditions
- 2 Integrated wiring compartment for ease of installation
- 3 Rugged aluminum or stainless steel construction for optimum environmental protection
- 4 Vibration-resistant mounting arm to ensure stability and maximize performance
- 5 Factory-calibrated automatic Optical Integrity (oi<sup>®</sup>) function to ensure continuous operation
- 6 Integrated data logger for event, time and date stamping

**HART**  
COMMUNICATION PROTOCOL



X5200 UVIR Flame Detector with Q9033B Stainless Steel Mounting Arm



X3301 Multispectrum Infrared Flame Detector with Q9033A Aluminum Mounting Arm

# A Proven Choice Around the World



## **X3301 MULTISPECTRUM INFRARED FLAME DETECTOR**

- ▲ The world's foremost flame detector, approved for the widest range of hydrocarbon fires
- ▲ Best in class for flame detection coverage and false alarm rejection
- ▲ Patented detection algorithms, optics and signal processing ensure reliable performance
- ▲ Marine approved for deck installation offshore

# Flame Detectors from Det-Tronics



## **X3302 MULTISPECTRUM INFRARED FLAME DETECTOR**

- ▲ Proven technology for fast detection of invisible hydrogen flames and methanol
- ▲ Performance approved at 100' (30.5m), on and off axis, for a 30" (76cm) plume of hydrogen
- ▲ Ideal for hydrogen storage, aerospace, battery rooms, refining and filling stations



## **X5200 ULTRAVIOLET/INFRARED FLAME DETECTOR**

- ▲ Leverages state-of-the-art UV and IR technologies to detect fire
- ▲ High-speed, versatile detector for specialty applications, such as munitions and aerosol filling
- ▲ Auxiliary relay offers the flexibility to customize detection, using UV, IR or both



## **X9800 INFRARED FLAME DETECTOR**

- ▲ Quick Fire technology for high-speed detection in areas with infrared sources
- ▲ Time Domain Signal Analysis (TDSA) provides superior detection capability while rejecting false alarm sources
- ▲ Economical, reliable detector for powder coating, paint spray booths, printing and industrial processes



## **X2200 ULTRAVIOLET FLAME DETECTOR**

- ▲ Ultraviolet sensor and advanced algorithm for rapid detection and false alarm immunity
- ▲ Responds to unusual fire types, such as metal and sulfur
- ▲ Superior signal processing meets stringent requirements for ultra high-speed response

# Innovative Flame and Safety Solutions



## EAGLE QUANTUM PREMIER® (EQP) SAFETY SYSTEM

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

## ACCESSORIES



Stainless Steel Mounting Arm



Aluminum Mounting Arm



X-Series Weather Shield



Universal Air Shield Assembly



Collar Attachment



Flange Mount



Laser/Aimer Holder



Field of View Limiter/ Weather Shield



xWatch Explosion-Proof Surveillance Camera



Inspector Connector with Monitor Software

# Select from Proven Products for Your Safety Needs

## PERFORMANCE APPROVED DETECTION RANGE (FM)

	X3301 Multispectrum Infrared	X3302 Multispectrum Infrared	X5200 Ultraviolet/ Infrared	X9800 Infrared	X2200 Ultraviolet
<b>n-Heptane</b> <i>1x1' (0.3 x 0.3m)</i>	210' (64m)		85' (26m)	85' (26m)	85' (26m)
<b>Diesel</b> <i>1x1' (0.3 x 0.3m)</i>	150' (46m)				
<b>Methanol</b> <i>1x1' (0.3 x 0.3m)</i>	150' (46m)	70' (21m)			
<b>Methane</b> <i>30" (0.7m)</i>	100' (30.5m)		65' (20m)	60' (18m)	100' (30.5m)
<b>Hydrogen</b> <i>30" (0.7m)</i>		100' (30.5m)			
<b>Black Powder</b> <i>40g</i>			10' (3m)	10' (3m)	10' (3m)
<b>JP-5</b> <i>1x1' (0.3 x 0.3m)</i>	150' (46m)				



## DETECTOR APPLICATION

	X3301 Multispectrum Infrared	X3302 Multispectrum Infrared	X5200 Ultraviolet/ Infrared	X9800 Infrared	X2200 Ultraviolet
Refinery	▲	▲	●	●	
Platform	▲		●	●	
Pipeline	▲		●	●	
Tank Farm	▲		●	●	
Loading Rack	▲		●	●	
Petrochemical	▲		●	●	●
FPSO	▲		●		
Marine	▲		●		
Turbine Enclosure	▲	▲	●		
Hydrogen		▲			●
Ammonia					●
Electrostatic Paint	▲			●	
Munitions			▲	●	●
Metal					▲
Printing			●	▲	●
Powder Coating			●	▲	
Transformer	▲		●		
Battery Room	●	▲			
Warehousing	▲		●		
Aerosol Fill			▲	●	●
Hangar	▲		●		

▲ Highly Recommended

● Recommended

# 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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Det-Tronics is certified to ISO 9001:2008 in all  
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