DET-TRONICS

Optical Flame Detection Solutions

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 VNIIPO to respond to a multitude of fuel sources

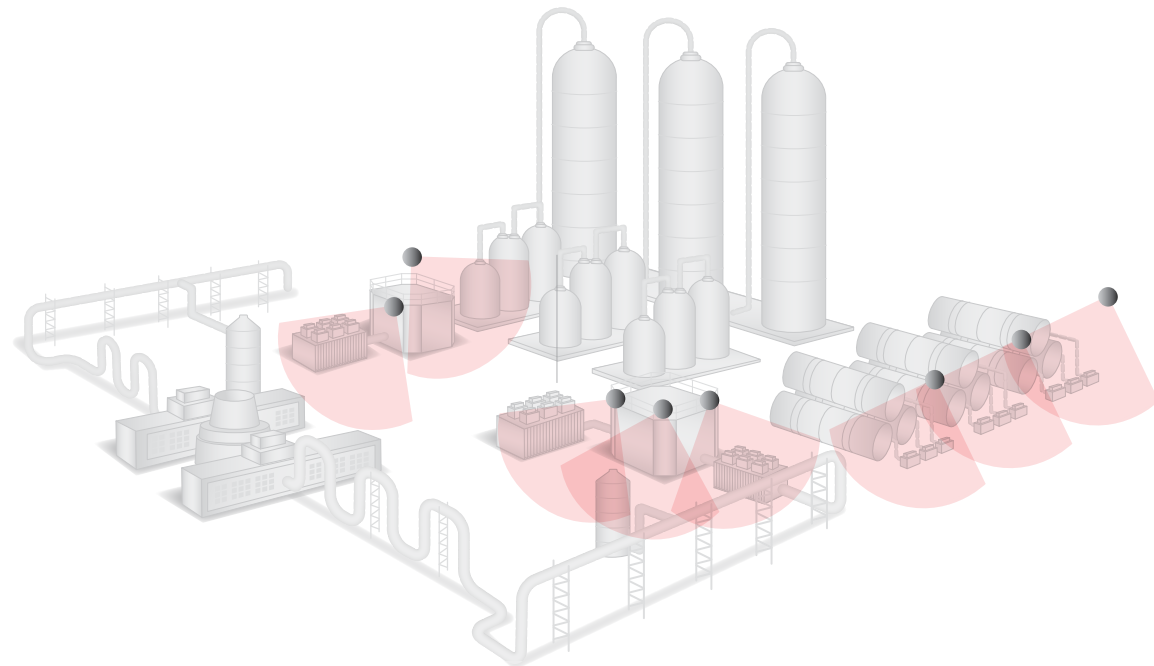▲ NFPA 72 compliant LON output for safety system integration

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®) function to ensure continuous operation

6. Integrated data logger for event, time and date stamping

HART COMMUNICATION PROTOCOL   FDT MEMBER

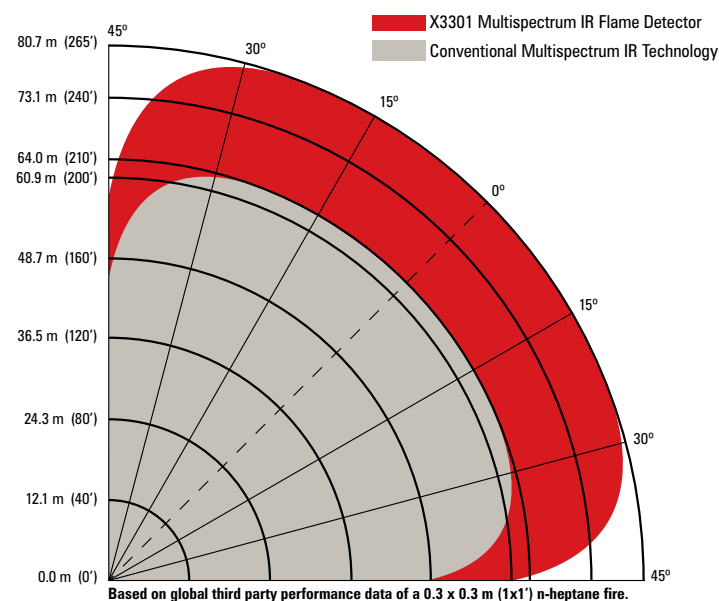X5200 UVIR Flame Detector with Q9033B Stainless Steel Mounting Arm

X3301 Multispectrum Infrared Flame Detector with Q9033A Aluminum Mounting Arm

A Proven Choice Around the World

Flame Detectors from Det-Tronics

SUPERIOR PERFORMANCE OF THE X3301 MULTISPECTRUM INFRARED FLAME DETECTOR

Legend:
- X3301 Multispectrum IR Flame Detector
- Conventional Multispectrum IR Technology

Vertical axis labels:
80.7 m (265')
73.1 m (240')
64.0 m (210')
60.9 m (200')
48.7 m (160')
36.5 m (120')
24.3 m (80')
12.1 m (40')
0.0 m (0')

Angle labels: 45°, 30°, 15°, 0°, 15°, 30°, 45°

Based on global third party performance data of a 0.3 x 0.3 m (1x1') n-heptane fire.

- ▲ The world's foremost flame detector, approved for the widest range of hydrocarbon fires
- ▲ Performance approved at 81m (265') for a 0.3 x 0.3m (1x1') n-Heptane fire
- ▲ 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

X3302 MULTISPECTRUM INFRARED FLAME DETECTOR

- ▲ Proven technology for fast detection of invisible hydrogen flames and methanol
- ▲ Performance approved at 38m (125'), on axis, for a 0.76m (30") hydrogen plume fire
- ▲ Ideal for hydrogen storage, aerospace, battery rooms, refining and filling stations

X5200 ULTRAVIOLET/INFRARED FLAME DETECTOR

- ▲ Leverages 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
- ▲ 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

Select from Proven Products for Your Safety Needs

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 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	Sun Shade for X-Series Flame Detectors	Inspector Software

PERFORMANCE APPROVED DETECTION RANGE (FM)

	X3301 Multispectrum Infrared	X3302 Multispectrum Infrared	X5200 Ultraviolet/ Infrared	X9800 Infrared	X2200 Ultraviolet
n-Heptane 0.3m x 0.3m (1x1')	81m (265')		26m (85')	26m (85')	26m (85')
Diesel 0.3m x 0.3m (1x1')	53m (175')				
Methanol 0.3m x 0.3m (1x1')	46m (150')	21m (70')			
Methane 0.81m (32")	38m (125')	16.8m (65')	20m (65')	18m (60')	30.5m (100')
Propane 0.81m (32")	38m (125')				
Hydrogen 0.76m (30")		38m (125')			
Black Powder 40g			3m (10')	3m (10')	3m (10')
Jet-A 0.3m x 0.3m (1x1')	46m (150')				

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

A Global Leader in Fire and Gas Safety Systems

MITIGATING FIRES

DET-TRONICS

PROTECTING LIVES

92-1068-2.8 (A4)

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