Flame Detection Selection Guide

Unsurpassed products comprise the industry’s most extensive lineup of optical flame detectors.

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**Flame Detection Technologies**

**MULTISPECTRUM IR**

The Protect IR X3301 and X3302 are the latest advancements in optical flame detectors. Designed to detect hydrocarbon or non-hydrocarbon fires, advanced multi-patented signal processing techniques are utilized to maintain alarm capabilities with modulated blackbody and other false alarm sources present. Features include increased range, sensitivity, coverage, and false alarm rejection.

Automatic optical integrity ensures reliability with a minimum of maintenance. Approved to FM 3260/2000. Can be installed as Class 1 Division 1, EEx de or EEx d. Applications include:

- Aircraft hangars
- Power generation
- Automotive
- Compressors
- FPSO
- Hydrogen stations
- Oil and gas refining and processing
- Compressors
- Gas cabinets
- Hydrogen
- Metal fab
- Solvent/chemical storage
- Pipeline
- Turbines
- High temperature locations
- Munitions
- Powder coating

**ULTRAVIOLET/INFRARED**

X2200 UV detectors are particularly suited for applications where hydrocarbon fires are likely and UV radiation sources may be present. They maintain constant fire protection while arc welding takes place. Signals from both UV and IR sensors are processed to produce a false alarm when both sensors detect a fire, resulting in good false alarm rejection capability.

APPLICATIONS:
- Aircraft hangars
- Loading Racks
- Powder coating
- High temperature locations
- Munitions
- Powder coating
- Transportation and storage

**DUAL SPECTRUM® IR**

Dual-Spectrum® models feature patented dual wavelength IR flame detection technology, for maximum reliability and a new level of false alarm rejection.

APPLICATIONS:
- Electrostatic painting
- Gas cabinets
- Hydrogen
- Metal fab
- Semiconductor fabrication tools and facilities

PM-95EB is a fiber optically coupled IR detector.

**SINGLE FREQUENCY IR**

X8800 single frequency IR detectors use patented signal processing TDSA and narrow frequency bandpass filter to detect radiation characteristics of hydrocarbon fires. The detector is completely solar insensitive.

IR detectors are suited for applications where high pressure hydrocarbon fires are likely to occur and high concentrations of oil or airborne contaminants may be present.

APPLICATIONS:
- Automotive Powder coating
- FPSO
- Offshore platform
- Pipelines

**ULTRAVIOLET**

X2200 UV detectors utilize a high speed, maximum sensitivity tube. Virtually all fires emit radiation in this band. The product’s unique design renders the UV detector solar blind.

Detectors are very flexible, general purpose indoor optical fire detection devices. They are fast, reliable and respond to most fires.

APPLICATIONS:
- Battery rooms
- High temperature locations
- Munitions
- Powder coating

**RETROFIT READY**

Direct retrofit detectors available with pulse output for use with R7404/ R7494 controllers.

APPLICATIONS:

- Relay Output Modules: Used with the controllers, these devices provide relay outputs and are available in a variety of configurations.

Power Supplies: Available to convert line voltage ac into dc operating power for the detection systems.

Mounting Cages: Available in a variety of sizes that hold from one to eight micro-module devices.

**Systems**

**FIRE AND GAS**

Det-Tronics integrates flame and gas detectors as well as other devices into a complete fire detection system.

APPLICATIONS:
- Compressed special hazard management systems are also custom designed for unique applications.

Eagle Quantum Premier is an NFPA-72 compliant, combination fire and gas detection and releasing system. This system offers unsurpassed functionality including high-speed flame detection, programmable configuration as well as fire and gas logic and agent releasing capability, with high performance gas detection.

Each system can be customized to meet specific application requirements. System capabilities include design, engineering, assembly, wiring, documentation, testing and startup.

**Accessories**

**FIRE AND GAS**

Laser aimer: Cone of vision tester for testing the area of coverage of the detector.

Air shields for reduced maintenance in areas where there is an abnormally high level of airborne contaminants.

Test lamps to test the system without using an open flame are available for detectors without manual or mag. ti.

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