



**Multi-Spectrum UV/Dual IR/VIS  
Fire and Flame Detector**

# FS20X Detector



## Features

- Patented\* WideBand IR™ Infrared combined with Ultraviolet
- Detection range greater than 200 feet to 1 sq. ft. heptane fire
- Patented\* Electronic Frequency Analysis
- Visible Sensor for optimum false alarm rejection
- Selectable detection sensitivities
- Solar blind 90° full 100% cone-of-vision
- Dual Microprocessors for reliable performance
- Real-time clock for accurate time dating of events
- FirePic™ — Up to 6 pre-fire event data storage
- Event log — Up to 200 events with date and time stamp
- Built-in RS-485 ModBus Communication
- Built-in non-isolated 4-20 mA analog output (sink or source)
- Alarm, Fault and Fire Verification relays.
- Automatic Optical Path and Electronic Self-Test
- Widest operating temperature range
- Patented\* Electronics Module for components protection with plug-in terminations for easy field installation
- Two ¾" NPT OR 25mm conduit entries
- Low power consumption
- High RFI and EMI immunity
- FM approved

## Benefits

- Detects hydrocarbon and non-hydrocarbon fuel fires in all environmental conditions
- Arc welding immunity
- False alarm rejection for all environmental conditions
- Minimal maintenance for trouble-free operation
- PC software and Interface Module (FSIM) for fault diagnostics real-time graphs (RTGs), and downloading of FirePics™ and event log
- Suitable for a wide variety of applications

## The FS20X is the latest generation high technology Multi-Spectrum (UV/Dual IR/VIS) Flame Detector, which is part of the FSX family of advanced technology Electro-Optical Flame detectors.

The FS20X detector represents a quantum leap in integrating Infrared and Ultraviolet sensing technologies. It is a Multi-Spectrum and UV/Dual IR/VIS fire and flame detector with a proven UV solar-blind sensor. The FS20X exhibits faster false-alarm free response to fires over a wider temperature range and with a much longer detection range compared to conventional UV/IR detectors.

## Applications

- Refineries and Oil Production Facilities
- Off-Shore Platforms
- Turbine/Compressor Enclosures
- Acetylene Processing and Storage
- Oil & Gas Pipelines and Pumping Stations
- LNG/LPG Loading & Unloading Facilities
- Natural Gas and CNG Plants
- Ethanol, Methanol, and IPA Production and Storage
- Crude Oil and Gasoline Storage and Tank Farms
- Aircraft Hangars
- Hydrogen Plants and Storage
- Paint & Solvent Storage
- Chemical Production, Storage, and Loading Facilities
- Power Plants
- Silane Gas Storage



\*Honeywell Patents

# FS20X Detector



Conventional and older technology UV/IR detectors, using narrow band 4.3 micron IR sensors, will not respond to smoky fires or if the detector lens is contaminated with oil and other substances since both UV and 4.3 micron signals are attenuated, obscured or absorbed by thick smoke or detector lens contaminations. Also, these old technology UV/IR detectors will not alarm to any fire if they are installed behind ordinary window glass.

The FS20X detector uses advanced patented algorithms for signal processing and fire and flame analysis is designed to alarm to all types of fires in all industrial environmental conditions. If the detector's UV signal is degraded due to heavy smoke or a contaminated lens, the FS20X's patented\* WideBand IR™, Near Band IR and Visible sensors will still alarm to fire but at a reduced sensitivity and slower response time.

Dual microprocessors provide a high level of fail-safe operation combined with fast and reliable performance. The Master Microprocessor performs high-speed digital sampling and signal processing calculations; while the slave microprocessor handles various sensor data, performs communications, self-diagnostics and provides interface versatility; and additional memory for storing Event Log and FirePic™ data.

The FS20X detector has a detection range in excess of 200 feet (very high sensitivity setting) for the detection of a one square-foot Heptane reference fire and has a cone of vision greater in volumetric coverage than most UV/IR detectors. This means fewer detectors can be used as compared to other manufacturers' detectors.

\*Honeywell Patents



# Honeywell Analytics Lines of Business



## Commercial

Gas detection from standalone units to fully engineered, multi-point systems, all offering cost-effective regulatory compliance

- » Applications: parking structures, chillers, mechanical rooms, office towers, commercial buildings, shopping centers, swimming pools, golf courses, schools and universities, laboratories

## Industrial

Renowned Sieger and Manning gas detection systems with advanced electrochemical, infrared and open path sensing technologies

- » Applications: oil and gas, cold storage, water/wastewater treatment, chemicals, engine rooms, plastics and fibers, agriculture, printing and light industrial

## Portables

Single or multi-gas Lumidor and other premium detectors with compact, lightweight designs ranging from simple alarm only units to advanced, fully configurable and serviceable instruments

- » Applications: underground utility and electricity ducts, boiler rooms, post-fire sites, sewers, industrial plants, industrial hygiene, first responder teams, remote fleets



## High Tech/Government

A complete portfolio of gas and chemical detection instrumentation including infrared spectroscopy (MST) with no cross interference, to Chemcassette paper-based solutions (MDA Scientific) offering detection down to parts per billion

- » Applications: semiconductor manufacturing and nanotechnology, aerospace propulsion and safety, specialty chemicals industry, research laboratories, emergency response

### Find out more

[www.honeywellanalytics.com](http://www.honeywellanalytics.com)

### Contact Honeywell Analytics:

#### Americas

Honeywell Analytics, Inc.  
405 Barclay Blvd.  
Lincolnshire, IL 60069  
USA

Tel: 847.955.8200

Toll-free: 800.538.0363

Fax: 847.955.8210

[detectgas@honeywell.com](mailto:detectgas@honeywell.com)

[www.honeywell.com](http://www.honeywell.com)

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Tollfree in Western Canada: 1-888-388-1592  
[microwatt.com](http://microwatt.com) • [mwsales@microwatt.com](mailto:mwsales@microwatt.com)

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