FD Series UV/IR

Honeywell





The FD Series UV/IR reacts to both UV and IR flame radiation, delivering accurate and reliable fire monitoring

FD Series UV/IR



Reliable Operation

- 120° field of view
- Two radiation wavelengths necessary for alarm— minimize false alarm events from lightning, welding, sunlight and radiation
- Manual and automatic testing of optical surfaces— monitors internal electronics
- Operating Range of -50°C to +75°C
- 3 year electronics and 2 year sensor warranty

Easy to Use

- Compact and lightweight for ease of installation
- Fully adjustable swivel mount is included
- User-defined sensitivity and time delay settings
- Built-in testing routines ensure continuous operation

Durable Housing

- Rugged, explosion-proof housing
- Stainless steel option ideal for harsh environments

Versatile Design

 Stand-alone operation or can be connected to a variety of control devices to create a dependable fire monitoring system The protection you need and trust. Protect your site and personnel with the FD Series UV/IR flame detector. Two spectrums of radiation must be recognized and confirmed by precisely tuned sensors for the detector to initiate a fire condition, which vastly reduces false alarms.



The detector reacts to both UV and IR flame radiation delivering accurate and reliable fire monitoring, yet is immune to arc welding, hot body radiation, lightning or sunlight.

Enclosed in a rugged, explosion-proof housing, the FD Series UV/IR uses the latest in modular microprocessor and UV/IR sensor technology. Capable of stand-alone operation or can be connected to a variety of control devices to create a dependable fire monitoring system. User-defined sensitivity and time delay settings combine with built-in testing routines to ensure continuous, reliable operation.

General Specifications



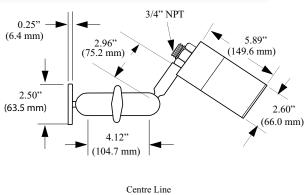
Standard Specifications			
Operating Voltage Range	10 to 32 Vpc		
Power Consumption	A Version: Nominal 35 mA / 0.84 W Maximum 65 mA / 1.6W (at 24 Voc) Nominal 78 mA / 1.88 W Maximum 112 mA / 2.7W (with heater) AR Version: Nominal 52 mA / 1.25 W Maximum 84 mA / 2.02W (at 24 Voc) Nominal 98 mA / 2.35 W Maximum 130 mA / 3.12W (with heater)		
Temperature Range	Certified -40°C to +75°C (-40°F to +167°F) Operational -50°C to +75°C (-58°F to +167°F)		
Field of View	120° horizontal / 95° vertical @ 50% of maximum on axis distance		
Spectral Range	UV Radiation 185 to 260 nanometres (1850 to 2600 angstroms) IR Radiation in the 4.4 micron range		
Time Delay	DIP switch selectable to 0, 3, 5, 7 seconds		
Sensitivity Settings	DIP switch selectable to 8, 16, 24 or 32 counts per second		
Typical Response Time	<6 seconds depending on fuel source, fire size and distance		
Enclosure Material	Anodized, copper-free aluminum (optional stainless steel) factory sealed housing		
Humidity Range	0 to 95% RH, non-condensing		
Weight (with swivel)	2.1 kg / 4.5 lb. (stainless steel option 3.4 kg / 7.5 lb.)		
Outputs	 A Version: 0 to 20 mA - Into a maximum loop impedance of 800 Ohms at 32 V dc or 150 Ohms at 11.0 Vbc Non-isolated loop supply AR Version: Form C contacts rated 1 Amp at 30 Vbc, 0.5 Amp at 125 Vac Selectable energized/de-energized, latching/non-latching fire relay Fault relay factory set as energized/non-latching, cannot be modified 		
Certifications	CSA and NRTL/C certified for hazardous locations. Class I, Division 1, Groups B, C and D. Temperature code T5 Enclosure type NEMA 4X, IP67. Ex d II B+H2 T5 (Class I, Zone 1, Grp II B+H2 T5) For Canada only: CSA certified for hazardous locations. Class I, Division 1, Groups B, C and D. Temperature code T5 Enclosure type NEMA 4X. Ex d II B+H2 T5. CE Ex II 2 G, Ex d II B+H2 T5 Factory Mutual (FM) flame detector performance certification FM3260		

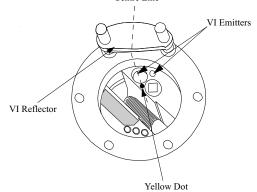
Summary of Distances

Fuel	Fire Size	Typical Response
n-heptane	1 ft. x 1 ft.	< 11sec @ 140 ft.
gasoline	1 ft. x 1 ft.	< 6sec @ 120 ft.
methane	30 in. plume	< 6sec @ 100 ft.

Immunity False Alarm Stimuli

Stimuli	Immunity Range
Direct/indirect sunlight	Total
1500W heater	10 ft.
Halogen, incandescent light	3 ft.
Florescent light	10 ft.
Arc welding (unmodulated)	10 ft.
Lightning	Total





Honeywell Analytics Lines of Business







Commercial

Vulcain-brand gas detection from standalone units to fully engineered, multipoint 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



Find out more

www.honeywellanalytics.com

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Technical Services

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Please Note

High Tech/Government

A complete portfolio of gas and chemical detection instrumentation including infrared spectroscopy (MST) with no cross interference, to Chemcassette paperbased 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

Europe, Middle East, Africa

Life Safety Distribution AG Wilstrasse 11-U31 CH-8610 Uster Switzerland Tel: +41 (0)44 943 4300 Fax: +41 (0)44 943 4398 gasdetection@honeywell.com

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



Technical Services

24/7 global network includes

post-sales service and Systems Integration teams

- Emergency call out, service contracts, on/off-site repair, training and commissioning
- Complete range of spares, consumables and accessories

Asia Pacific

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