FLAME
PRODUCT GUIDE

Fixed Flame Detection
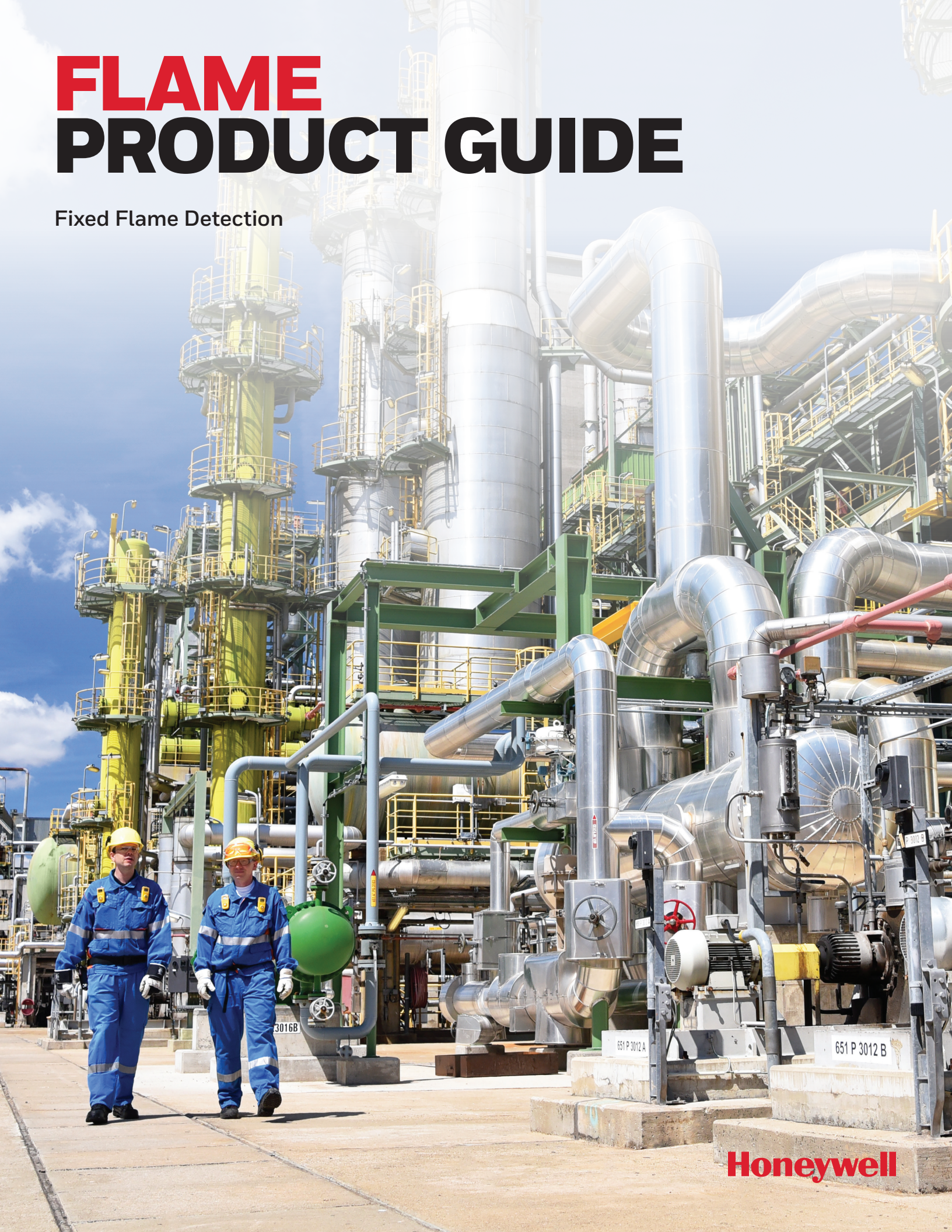
Honeywell

TABLE OF CONTENTS

Table of Contents:

* Not all versions are available globally

FS SERIES FLAME DETECTORS

QUICK REFERENCE

DESCRIPTION		FS24X Plus	FS20X	FS10	FS7
Spectral Sensitivity	Ultraviolet Band (0.18 – 0.26 µm)		×		
	Visible Band (0.4 – 0.7µm)		×	×	×
	Near Band IR (0.7 – 1.1 µm)	×	×	×	×
	Wide Band IR (0.7 – 4.2 µm)	×			
	Wide Band IR (0.7 – 3.5 µm)			×	×
	Wide Band IR (1.1 – 3.5 µm)		×		
	Long Band IR (3.0 – 5.0 µm)	×			
Sensitivity (feet)[1]	Very High	200	200		
	High	150	150	45	
	Medium / Standard	100	100	30	8
	Low	50	50	15	4
Response Time[1]	Fireball / Quick Response Option (300 mS)			×	
	Fire Early Warning (1 s)			×	
	Typical Response Time	5 s	5 s	5 s	5 s
Enclosures	Aluminum Class 1, Division 1	×	×	×	
	316 SS Class 1, Division 1	×	×	×	
Field of View (Conical)	See Manual for Details	90°/120°	90°/120°	90°	120°
Communication	HART®	×[2]	×		
	Honeywell FP2	×			
	Honeywell Firebus II		×	×	×
	Modbus	×	×		
Certifications	FM	×	×	×	×
	cFM	×	×		
	ATEX	×	×		
	IECEx	×	×		
	INMETRO	×	×		
	CU-TR	×	×		
	IEC61508 (SIL 2)	×	×[3]		
	EN54-10	×[2]	×		
	Marine (DNV, BV, Lloyds, ABS, MED, USCG)[4]	×			
	CCC/CCCF[4]	×	×		
Test Lamps	TL-2055 (HAZLOC)	×	×		
	TL-1055 (Safe Area)	×	×		
	FT-2145 (HAZLOC)			×	×
	FT-S7 (Safe Area)			×	×
Mounting Bracket	SM4 (Standard Version)	×	×	×	
	SM4-M (Marine Version)	×	×	×	
Conduit Entries	M25	×	×		
	3/4" NPT	×	×	×	
Operating Temperature	-55° C to +75° C	×			
	-40° C to +85° C		×	×	
	0° C to +70° C				×
Analog Output (4-20mA)	Source	×	×		
	Sink	×	×		
	Isolated	×			
Relays	Alert Flame Early Warning			×	×
	Alarm	×	×	×	×
	Verified Alarm	×	×		
	Fault	×	×	×	×
Diagnostics	Event Logs	5000	200	200	200
	FirePics™	10	6	6	6

[1] See product manual for full details
[2] Standard option
[3] SIL Rating: FMEDA available on request
[4] Contact Honeywell for availability

FS SERIES FLAME DETECTORS

INDUSTRIAL APPLICATIONS

INDUSTRY	APPLICATION	FS24X Plus	FS20X	FS10	FS7
Finishing	Aerosol Filling Facilities	◐	◐	●	○
	Automotive Paint Lines	○	○	●	○
	Curing Ovens	○	○	●	○
	General Finishing	○	○	●	○
	Liquid Paint Spray Line	○	○	●	○
	Paint and Solvent Storage	◐	◐	●	○
	Powder Coating Booths	○	○	●	○
General	Aircraft Hangars	●	●	○	○
	Airport Terminals	◐	◐	○	○
	Cold Storage Warehouses	◐	◐	○	○
	Engine Test Cells	●	●	○	○
	General Warehouse	●	●	○	○
	Lumber Storage	●	●	○	○
	Marine Engine Rooms	●	●	○	○
	Marine Terminals	●	●	○	○
	Power Plants	●	●	○	○
	Clean Rooms	○	◐	○	●
	Gas Cabinets	○	◐	○	●
	Hydrogen Gas Cabinets	◐	◐	○	○
	Hydrogen Plants	◐	◐	○	○
	Hydrogen Storage	◐	◐	○	○
	Isopropyl Alcohol Stations	◐	◐	○	○
	Silane Gas Cabinets	○	◐	○	○
	Silane Gas Manufacturing	○	◐	○	○
	Silane Gas Storage	○	◐	○	○
Oil, Gas and Petrochemicals	Acetylene Processing and Storage	○	●	○	○
	Chemical Storage	●	●	○	○
	Cogeneration Plants	●	●	○	○
	Crude and Product Tank Farms	●	◐	○	○
	Ethanol Production and Storage	●	●	○	○
	Gas Collection Facilities	●	●	○	○
	Gas Compressor Buildings	●	●	○	○
	Gas Processing Plants	●	●	○	○
	Gas Turbine Enclosures	●	●	○	○
	Gasoline Loading Terminals	●	●	○	○
	Isopropanol (IPA) Production and Storage	●	●	○	○
	LNG Storage/Distribution	●	●	○	○
	LPG Storage/Distribution	●	●	○	○
	Methanol Production and Storage	●	●	○	○
	Natural Gas and CNG Plants	●	●	○	○
	Offshore Drilling Platforms	●	◐	○	○
	Offshore Production Platforms	●	◐	○	○
	Petrochemical Plants	●	●	○	○
	Petroleum Product Pipelines	●	●	○	○
	Petroleum Product Pumping Stations	●	●	○	○
	Rail and Truck Loading/Unloading	●	●	○	○
	Refineries	●	●	○	○
Semi-Conductor	Open Areas of Clean Room	○	◐	○	●
	Wet Bench Working Surfaces	○	◐	○	●
	Wet Bench Subsurface (Plenum)	○	◐	○	●
	Equipment Located Behind the Wet Bench Area	○	◐	○	●
	Under-floor Areas	○	◐	○	●
	IPA Stations (Unitized model only)	○	◐	○	●

Key: ○ Not recommended ◐ Suitable *(pending end-user review)* ● Recommended

FS24X PLUS
ADVANCED FLAME DETECTOR

> Honeywell's FS24X Plus 3IR flame detector responds to hydrocarbon and hydrogen fires in a solid field of view, providing fast and reliable protection against a wide range of fires.

Enhance your overall fire and gas safety by deploying reliable flame detection that can see through rain, fog and smoke better than other technologies. Designed for demanding industrial applications, the FS24X Plus helps businesses protect people, plants, and processes should a detectable fire occur.

FEATURES

- WideBand IR Technology
- Selectable detection sensitivities
- 90° cone of vision; 120° cone of vision (50% on axis range)
- Real-time clock for accurate time dating of events
- FirePic — pre-fire event data storage
- Event log with date and time stamp
- HART® and Modbus communication standard
- Sink, Source or Isolated 4-20 mA analog output
- Alarm, Fault and Auxiliary relays
- Automatic optical path and electronic self-test
- Wide operating temperature range
- Electronics module with components protection for easy plug-in terminations and field installation
- Two 3/4" NPT or M25 conduit entries
- Aluminum or stainless steel housing
- FM, ATEX, CE mark approvals
- IEC61508 SIL 2 Certified
- FlameManager software for programming, diagnostics, and downloading of FirePics and event log

BENEFITS

- Delivers robust flame and fire protection
- Maintains coverage while operating in challenging, low-visibility conditions, due to it has advanced solid-state, wide-band sensors
- Uses advanced diagnostics, including window clarity, to maintain site protection
- Enables simple mechanical installation when combined with the included sunshade and SM4 mounting bracket (a marine-version mount is also available)
- Allows quick electrical installation, with its two cable inlets and plug in connections
- Quick and easy to set up with the included PC software
- Integrates easily into your systems because it has multiple user-selectable outputs, including 4-20mA, Relays, HART® and Modbus
- Clearly communicates current status, even from a distance, with a high-visibility LED HALO ring: Green (Normal), Yellow (Fault/Warning) or Red (Alarm)

- Requires minimal maintenance for trouble-free operation: internal diagnostics and warnings drive maintenance; simple test lamp allows quick and easy testing at distance (no need to climb to the instrument); replaceable electro-optics modules enable convenient field replacement

MARINE CERTIFICATIONS

- ABS
- Lloyds
- BV
- DNV
- MED
- USCG

FS SERIES FLAME DETECTORS

FS24X PLUS

FS24X PLUS 3IR FLAME DETECTOR

PART NUMBER	DESCRIPTION
FS24XP-ANGXX	3IR – AL – 3/4" NPT kit includes mount and sunshade
FS24XP-AMGXX	3IR – AL – M25 kit includes mount and sunshade
FS24XP-SNGXX	3IR – SS – 3/4" NPT kit includes mount and sunshade
FS24XP-SMGXX	3IR – SS – M25 kit includes mount and sunshade
FS24XP-ANGXM	3IR – AL – 3/4" NPT kit includes marine mount and sunshade
FS24XP-AMGXM	3IR – AL – M25 kit includes marine mount and sunshade
FS24XP-SNGXM	3IR – SS – 3/4" NPT kit includes marine mount and sunshade
FS24XP-SMGXM	3IR – SS – M25 kit includes marine mount and sunshade

ACCESSORIES

PART NUMBER	DESCRIPTION
SM4	Stainless steel swivel mounting assembly
SM4-M	Stainless steel swivel mounting assembly – Marine Version
TL-2055	Test lamp for FSX and FSX Plus, explosion proof, includes universal charger
TL-1055	Test lamp for FSX and FSX Plus, non-explosion proof, includes universal charger
FS24XP-NFPA-KIT	NFPA conversion kit (terminal blocks)
SH-001	Stainless steel sunshade

SPARE PARTS

PART NUMBER	DESCRIPTION
FS24XP-PUCK	FS24X Plus – 3IR – Spare Puck Kit
FSX-A006	Replacement bulb for TL-1055 or TL-2055

FS SERIES FLAME DETECTORS

FS20X
MULTI-SPECTRUM
FLAME DETECTOR

The FS20X is part of the FSX family of advanced technology Electro-Optical Flame Detectors and is a quantum leap in integrating infrared and ultraviolet sensing technologies.

Based on the foundation of the highly successful and reliable SS4 detector, the FS20X is a multi-spectrum (UV/Dual IR/VIS) fire and flame detector with a proven UV solar-blind Sensor. The FS20X exhibits fast false-alarm-free response to fires over a wider temperature range and with long detection distance.

FEATURES

- WideBand IR Infrared combined with Ultraviolet
- Detection range greater than 200 feet to 1 square foot heptane fire
- Electronic Frequency Analysis
- Visible sensor for optimum false alarm rejection
- Selectable detection sensitivities
- Solar blind 90° 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
- Wide operating temperature range
- Electronics Module for components protection with plug-in terminations for easy field installation
- Two 3/4 inch NPT or 25 mm conduit entries
- FM, ATEX, CE mark approvals
- Meets SIL 2 requirements

BENEFITS

- Detects hydrocarbon and non-hydrocarbon fuel fires in tough 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

CERTIFICATIONS

- FM: Class I, Div. 1 & 2, Groups B, C, & D; Class II, Div. 1 & 2, Groups E, F, & G; Class III
- ATEX: II 2 G D; Ex d IIC T4 (Ta: -40 to +110°C), T5 (Ta: -40 to +75°C), T6 (Ta: -40 to +60°C)
- CE: Complies with EN6100-6-4 & EN50130-4, EN54-10:2002 + A1:2005

FS SERIES FLAME DETECTORS

FS20X SERIES

FS20X-211 SERIES, STANDARD TEMPERATURE RANGE -40° TO 85°C

PART NUMBER	DESCRIPTION
FS20X-211-21-2	Dual IR/UV copper-free aluminum enclosure with (2) 3/4" NPT entries, FM, cFM for Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III
FS20X-211-22-2	Dual IR/UV 316 stainless steel enclosure with (2) 3/4" NPT entries, FM, cFM for Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III
FS20X-211-23-3	Dual IR/UV copper-free aluminum enclosure with (2) M25 entries, FM, cFM, ATEX, IECEx for Class I, Zone 1
FS20X-211-24-3	Dual IR/UV 316 stainless steel enclosure with (2) M25 entries, FM, cFM, ATEX, IECEx for Class I, Zone 1
FS20X-211-21-4	Dual IR/UV copper-free aluminum enclosure with (2) 3/4" NPT entries, INMETRO
FS20X-211-22-4	Dual IR/UV 316 stainless steel enclosure with (2) 3/4" NPT entries, INMETRO
FS20X-211-23-4	Dual IR/UV copper-free aluminum enclosure with (2) M25 entries, INMETRO
FS20X-211-24-4	Dual IR/UV 316 stainless steel enclosure with (2) M25 entries, INMETRO

FS20X-212 SERIES W ITH HART®, STANDARD TEMPERATURE RANGE -40° TO 85°C

PART NUMBER	DESCRIPTION
FS20X-212-21-2	Dual IR/UV copper-free aluminum enclosure with (2) 3/4" entries, FM/cFM, HART® module factory installed
FS20X-212-22-2	Dual IR/UV 316 stainless steel enclosure with (2) 3/4" entries, FM/cFM, HART® module factory installed
FS20X-212-23-3	Dual IR/UV copper-free aluminum enclosure with (2) M25 entries, ATEX/IECEx, HART® module factory installed
FS20X-212-24-3	Dual IR/UV 316 stainless steel enclosure with (2) M25 entries, ATEX/IECEx, HART® module factory installed
FS20X-212-21-4	Dual IR/UV copper-free aluminum enclosure with (2) 3/4" NPT entries, INMETRO, HART® module factory installed
FS20X-212-22-4	Dual IR/UV 316 stainless steel enclosure with (2) 3/4" NPT entries, INMETRO, HART® module factory installed
FS20X-212-23-4	Dual IR/UV copper-free aluminum enclosure with (2) M25 entries, INMETRO, HART® module factory installed
FS20X-212-24-4	Dual IR/UV 316 stainless steel enclosure with (2) M25 entries, INMETRO, HART® module factory installed

ACCESSORIES

PART NUMBER	DESCRIPTION
FVR-01	Field of View Restrictor
PSU-12	Universal charger for Test Lamps for 110-240 VAC with international plugs
SH-001	Stainless Steel Sunshade
SM4	Stainless Steel Swivel Mounting Assembly
TL-1055	Test lamp for FSX and FSX Plus, non-explosion proof, includes universal charger
TL-2055	Test lamp for FSX and FSX Plus, explosion proof, includes universal charger

REPLACEMENT DETECTOR MODULE

PART NUMBER	DESCRIPTION
FS20X-211-10	FS20X Replacement Detector Module
FS20X-212-10	FS20X Replacement Detector Module with HART®

SPARE PARTS

PART NUMBER	DESCRIPTION
FSX-A006	Replacement bulb for TL-1055 or TL-2055
FSX-A011	Grill kit
PW-3123-0005	Battery pack for FT-2145/TL-1055/TL-2055 Test Lamp

FS SERIES FLAME DETECTORS

FS10
MULTI-SPECTRUM
FLAME DETECTOR

The FS10 System, for liquid paint spray and electrostatic powder coating applications, is a two-stage response system: an Alert for spray gun "fireball" type of fires and a Fire Alarm in 4-5 seconds if the fire continues.

A high-speed microprocessor based fire detection and process control system specially designed for liquid and powder coating applications, the FS10 System quickly detects the presence of a flame, reacts by initiating a shutdown of the electrostatic finishing process in a matter of milliseconds and effectively interrupts the fire before residues and wet paint films can ignite.

FEATURES

- Multi-spectral digital electro-optical infrared fire detector
- Meets requirements of NFPA 33
- Unique two-stage Alert and Fire Alarm response
- 90° field-of-view with a 15 ft. detection range
- Built-in automatic "through the lens" self-test
- Digital communications with RS-485 interface

BENEFITS

- Resistant to false alarms caused by arcs or corona discharges
- Not sensitive to background radiant energy sources such as paint heaters
- Not affected by absorbing smoke or paint solvent mist in liquid pant spray booths
- Sees through paint, powder or oil residue on the detector's lens

CERTIFICATIONS

- Explosion-Proof; Class I, Div. 1 & 2, Groups B, C, & D Class II, Div. 1 & 2, Groups E, F, & G, Class III
- FM

FS10 SYSTEMS

CARD CONTROLLER WITH FS10 ELECTRO-OPTICAL FLAME DETECTOR

Includes PC software and manual. Requires backplane card and 24 Vdc.

PART NUMBER	DESCRIPTION
Option-2FL	2FL system: liquid paint spray line applications with (2) fire signal relay levels
Option-2GF	2GF system: general finishing applications with process control and fire alarm signal relays
Option-2WE	2WE system: powder coating and paint spray line applications with (2) fire signal relay levels
Option-2WL	2WL system: paint spray line applications with (3) fire signal relay levels
Option-2GE	2GE system: powder coating and paint spray line applications with (2) fire signal relay levels
BP-1	Backplane for 1 card controller
BP-2	Backplane for 2 card controller
BP-4-L9	Backplane for 4 card controller

SPARE PARTS - FS10 WALL MOUNT CONTROLLER & CARD CONTROLLER

PART NUMBER	DESCRIPTION
SW-5143-001	Replacement keypad for FS10 wallmount
FS10-CARD-2FL	Liquid paint spray line applications with (2) fire signal relay levels
FS10-CARD-2GE	Powder coating and paint spray line applications with (2) fire signal relay levels
FS10-CARD-2GF	General finishing applications with process control and fire alarm signal relays
FS10-CARD-2WL	Paint spray line applications with (3) fire signal relay levels
FS10-DETECTOR	Model FS10 fire detector for use with wall mount controller or card controller
FS10-DET-MODULE	Replacement electronics module for fire detector for the above systems

DETECTOR CABLES - CARD CONTROLLER WITH FS10 ELECTRO-OPTICAL FLAME DETECTOR

PART NUMBER	DESCRIPTION
CAB-50	50 ft. card controller cable; connects fire detector to controller
CAB-100	100 ft. card controller cable; connects fire detector to controller

FS SERIES FLAME DETECTORS

FS10 STAND ALONE (UNITIZED)

Includes Alarm and Fault relays, 24 Vdc input with temperature range -40°C to +85°C.
Approvals: FM; Class I, Div. 1 & 2; Groups B, C, & D; Class II, Div. 1 & 2; Groups E, F, G and Class III.

PART NUMBER	DESCRIPTION
FS10-R30	Copper-free aluminum housing includes Alert/Fire Early Warning Relay, 30 ft. sensitivity (latching alert and alarm relays)
FS10-R30-SS	316 stainless steel housing includes Alert/Fire Early Warning Relay, 30 ft. sensitivity (latching alert and alarm relays)
FS10-R30-EC	Copper-free aluminum housing includes Alert/Fire Early Warning Relay, 30 ft. sensitivity (latching alert and alarm relays), normally energized with normally closed contacts
FS10-R45	Copper-free aluminum housing, 45 ft. sensitivity (latching alarm relays)
FS10-R45-SS	316 stainless steel housing, 45 ft. sensitivity (latching alarm relays)
FS10-RN30	Copper-free aluminum housing includes Alert/Fire Early Warning Relay, 30 ft. sensitivity (non-latching alert and alarm relays)
FS10-RN30-SS	316 stainless steel housing includes Alert/Fire Early Warning Relay, 30 ft. sensitivity (non-latching alert and alarm relays)
FS10-RN45	Copper-free aluminum housing, 45 ft. sensitivity (non-latching alarm relays)
FS10-RN45-SS	316 stainless steel housing, 45 ft. sensitivity (non-latching alarm relays)

SPARE PARTS – FS10 STAND ALONE (UNITIZED)

PART NUMBER	DESCRIPTION
FS10-R30-MOD	Replacement electronics module for Model FS10-R30 stand alone fire detector (latching alert and alarm relays)
FS10-R30-EC-MOD	Replacement electronics module for Model FS10-R30 stand alone fire detector (latching alert and alarm relays), normally energized with normally closed contacts
FS10-R45-MOD	Replacement electronics module for Model FS10-R45 stand alone fire detector (latching alarm relay)
FS10-RN30-MOD	Replacement electronics module for Model FS10-RN30 stand alone fire detector (non-latching alert and alarm relays)
FS10-RN45-MOD	Replacement electronics module for Model FS10-RN45 stand alone fire detector (non-latching alarm relay)
Card Controller with FS10 Stand Alone (Unitized)	
FS10R-GR-Kit	Stainless steel grill kit for FS10-R and FS10-CS Detectors (Killark housing) includes: (1) SS grill, (2) SS brackets, and (2) SS screws
RS-232 Cable	RS232 computer cable for connection from FS7-130-SX, S7-2175, option-1 or option-2 controllers or interface box to PC
PSU-12	Universal charger for Test Lamps; for 110-240 VAC with international plugs

ACCESSORIES – FS10 STAND ALONE (UNITIZED)

PART NUMBER	DESCRIPTION
SM4	Stainless Steel Swivel Mounting Assembly
FT-S7	Test lamp, battery operated for testing FS10 and FS7
EXPL-1	DPC-12 extension pole for placing and removing disposable protective covers on FS10 detectors
DPC-12	Disposable protective covers for use with FS10 only; keeps powder or paint off window lens of the FS10 fire detector; 12 per bag
DASA1-P	Air shield for powder applications protects FS10 fire detector window lens from powder build-up; supplied with fitting for 1/4" tubing; can also be used with FS24X, FS20X
DASA6-N	Air shield for powder applications protects FS10 fire detector window lens from powder build-up; supplied with fitting for 6 mm tubing

FS SERIES FLAME DETECTORS

FS7
MULTI-SPECTRUM
FLAME DETECTOR

> The FS7 provides a two-stage response to semiconductor wet bench fires: an Alert to a small fire with a 3 kW heat energy output and an Alarm if the fire grows to a 13 kW heat energy output.

The FS7 Flame Detector system first sends an Alert in response to a small fire (the equivalent of a 4-inch diameter polypropylene pool fire) which may self-extinguish. If the fire does not self-extinguish and grows to the factory mutual specified heat energy threshold of 13 kW (the equivalent of an 8-inch diameter polypropylene pool fire) then the second stage is activated and sends an Alarm in response.

The FS7-2173 is used with FS7-130-SX Controller which supplies power, monitors status and communicates with detectors via the digital RS-485 communication channel. FS7-2173 is supplied with a standard 20 ft. cable connector. Detectors are connected to the controller using the self-locking connectors and junction boxes. This allows for fast and easy connections and eliminates wiring problems. Each detector can store up to six time and date stamped FirePics (pre-event, multi-spectral sensor array data) in non-volatile memory. A controller can also store an event history table in the non-volatile memory which also contains the time and date stamped alert, alarm and fault histories. FirePics and event histories can be retrieved from the controller.

FEATURES

- Multi-spectral digital electro-optical radiant energy infrared fire detector
- Unique two-stage fire detection response
- Rugged leak-proof, heat-sealed, acid-resistant, injection-molded polypropylene housing
- Wide 120° field-of-view
- Digital communication with RS-485 interface
- FirePic – time and date-stamped digital fire signatures
- Built-in detector automatic self-test
- Unitized model design for stand-alone operation

BENEFITS

- Resistant to false alarm sources
- Detects hydrocarbon and non-hydrocarbon fires
- Not affected by absorbing smoke, gasses or chemical vapors
- Not sensitive to background radiant energy from electric heaters and ovens

FS SERIES FLAME DETECTORS

FS7

DETECTOR PARTS

PART NUMBER	DESCRIPTION
FS7-2173	Viton O-ring for use with FS7-130-SX Controller
FS7-2173-2RP	Viton O-ring for use with non-latching Alert and Alarm relays.
FS7-2173-2RP-K	Kal-rez O-ring for use with non-latching Alert and Alarm relays
FS7-2173-KALO	Kal-rez O-ring for use with FS7-130-SX Controller

CONTROLLER SYSTEMS

PART NUMBER	DESCRIPTION
FS7-130-SX	Multi-zone Compact Controller designed for fire panels installation; monitors up to (12) Model FS7-2173 detectors; programmable up to 4 zones with relay outputs for Alert and Alarm; requires 24 VDC; FM and CSFM approvals

ACCESSORIES

PART NUMBER	DESCRIPTION
FT-S7	Test lamp, battery operated for testing FS10 and FS7
FS7-2179	Junction box for connecting Model FS7-2173 fire detectors in a daisy chain or star configuration; includes (4) Lemo female connectors; required for Model FS7-130-SX applications

INTERCONNECTION CABLES

PART NUMBER	DESCRIPTION
CBMM-5	5 ft. cable with Male/Male Lemo connectors (Junction box to Junction box)
CBMM-10	10 ft. cable with Male/Male Lemo connectors (Junction box to Junction box)
CBMO-20	20 ft. cable with Male Lemo connector/open pigtail (Junction box to Model FS7-130-SX Controller or Model S7-2175 Control Panel)
CBMO-50	50 ft. cable with Male Lemo connector/open pigtail (Junction Box to Model FS7-130-SX Controller or Model S7-2175 Control Panel)

SPARE PARTS

PART NUMBER	DESCRIPTION
PSU-12	Universal charger for test lamps; for 110-240 VAC with international plugs
PW-3123-0002	Replacement battery for FT-S7 Tester

FSL100 SERIES FLAME DETECTORS

QUICK REFERENCE

SPECIFICATIONS	FSL100 UV	FSL100 UV/IR	FSL100 IR3
Range (feet)[1]	75	75	115
Cone of vision	90°	90°	90°
Operating temperature	-40° C to +70° C	-40° C to +70° C	-40° C to +70° C
Operating temperature – ATEX and FM Class 3611	-25° C to +70° C	-25° C to +70° C	-25° C to +70° C
IP rating	IP65	IP65	IP65
Alarm response time	8 to 30 seconds	8 to 30 seconds	8 to 30 seconds

[1] See product manual for full details

COMMERCIAL APPLICATIONS

APPLICATION	FSL100 UV	FSL100 UV/IR	FSL100 IR3
Aircraft hangars	○	◐	●
Atriums	○	◐	●
Battery storage rooms / data communication	◐	●	○
Biogas	○	◐	●
Car, bus, tram and train parking	○	◐	●
Clean rooms: semi-conductor, pharmaceutical, hospital operating rooms	◐	●	○
CNG filling/refilling for buses (public transportation)	○	●	●
Cold storage	●	○	○
Diesel engine rooms	○	◐	●
Electric power transformers	○	●	◐
Engine test cells/rooms	◐	●	●
Fume hoods	●	◐	○
Gas cabinets	◐	●	◐
Gas/gasoline engine rooms	◐	●	●
Heating rooms for chemicals	●	◐	○
Indoor chemical, fuel, and solvent storage	◐	●	◐
Indoor hydrocarbon storage and processing	◐	◐	●
Indoor hydrogen storage and processing	●	●	○
Laboratories	◐	●	◐
Loading and unloading terminals: truck, rail, & marine	○	●	●
Monitoring of machinery	◐	●	●
Oil and Gas pipe line and pumping stations	○	◐	●
Outdoor chemical, fuel, paint, and solvent storage	○	◐	●
Outdoor hydrogen storage and processing	○	●	○
Paint spray booths	○	○	●
Radio amplifier rooms / Isolators for antennas	●	○	○
Recycling and waste processing plants	○	◐	●

Key: ○ Not recommended ◐ Suitable (pending end-user review) ● Recommended

FSL100 SERIES
FLAME DETECTOR

The FSL100 series consists of UV, UV/IR and IR3 flame detectors and is the latest generation of mid-market flame detectors from Honeywell.

The FSL100 Series utilizes sophisticated sensing and signal analysis to detect fires quickly while also rejecting false alarms. FSL100 products may be small and lightweight for easy installation but they are designed to work in tough environments both indoors and outdoors. With a large field of view, they can detect a range of different types of fires including hydrocarbon and non hydrocarbon.

UV (ULTRAVIOLET) FLAME DETECTOR

PART NUMBER	DESCRIPTION
FSL100-UV	Suitable for ATEX zone 2/22; FM 3611 Class 1,2&3 Div2; EN54-10 (high sensitivity) certificate; FM3260 approval; Red housing
FSL100-UV-W	Suitable for ATEX zone 2/22; FM 3611 Class 1,2&3 Div2; EN54-10 (high sensitivity) certificate; FM3260 approval; White housing

UV/IR (ULTRAVIOLET & INFRARED) FLAME DETECTOR

PART NUMBER	DESCRIPTION
FSL100-UVIR	Suitable for ATEX zone 2/22; FM 3611 Class 1,2&3 Div2; EN54-10 (high sensitivity) certificate; FM3260 approval; Red housing
FSL100-UVIR-W	Suitable for ATEX zone 2/22; FM 3611 Class 1,2&3 Div2; EN54-10 (high sensitivity) certificate; FM3260 approval; White housing

IR3 (TRIPLE INFRARED) FLAME DETECTOR

PART NUMBER	DESCRIPTION
FSL100-IR3	Suitable for ATEX zone 2/22; FM 3611 Class 1,2&3 Div2; EN54-10 (high sensitivity) certificate; FM3260 approval; Red housing
FSL100-IR3-W	Suitable for ATEX zone 2/22; FM 3611 Class 1,2&3 Div2; EN54-10 (high sensitivity) certificate; FM3260 approval; White housing

ACCESSORIES

PART NUMBER	DESCRIPTION
FSL100-SM21	Optional swivel mount
FSL100-TL	Test lamp, includes universal charger and carrying case; non EX
FSL100-TLX	Test lamp, includes carrying case; intrinsically safe

SPARE PARTS

PART NUMBER	DESCRIPTION
FSL100-TLBT	12 Vdc battery for FSL-TL test lamp
FSL100-TLBU	H3 light bulb for FSL-TL test lamp
FSL100–TLCH	Universal charger kit for FSL-TL test lamp

For more information

sps.honeywell.com

Honeywell