SPECTREX

KEEP A SHARPEYE
ON YOUR SAFETY

FS-1100

FLAME SIMULATOR

FOR SPECTREX IR3
FLAME DETECTORS

Providing foolproof, full loop testing of your flame detection system in Zones 1 and 2, Zones 21 and 22 hazardous areas at up to 39.3ft (12m) testing distance

BECAUSE YOU NEED TO BE ABSOLUTELY SURE!

To be fully secure against fire, flame detector self-testing is not enough. According to most local jurisdictional authorities and as required for SIL2 compliance, you need to test and ensure the integrity of your entire flame detection system at least once per year. That means performing a full system loop test from the detector, through the wiring to the controller, and up to the actual alarm notification. The only way to do so, without lighting a real fire, is with an external flame simulator.

Complete End-to-End Testing Using our Flame Simulator

The FS-1100 FLAME SIMULATOR is the essential complimentary tool to the self-testing capabilities of your Sharpeye™ IR3 Flame Detectors. It brings fire prevention safety to a higher level by giving you the ability to fully test the operational readiness of your entire fire detection system:

- **Test the integrity of all the system components:** all alarm outputs, all cabling and connections and the fire alarm panel functionality.
- **Test clear line of sight:** By using the Spectrex Flame Simulator, you will ensure that no object is obstructing the field of view, and that the detector's window lens is not obscured.

Therefore, by simulating a fire that actually triggers the detector outputs, the model FS-1100 verifies the correct operation of the IR3 detector, performs an essential end-to-end loop test and verifies window cleanliness.

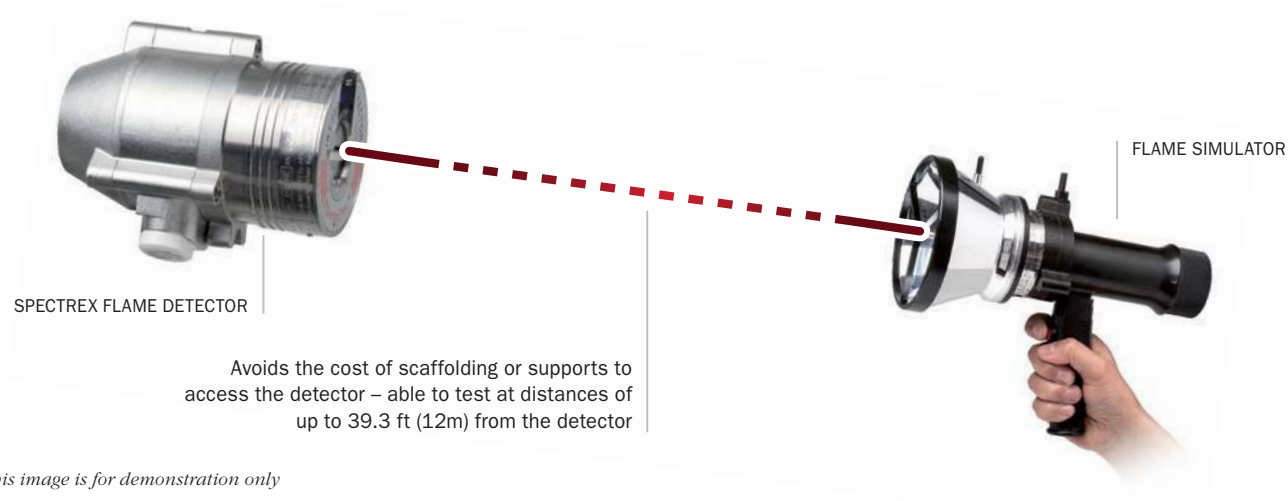
The robust and reliable FS-1100 FLAME SIMULATOR allows remote testing of flame detectors, which are often located in difficult to access and/or classified hazardous areas (Zones 1 & 2, Zones 21 & 22).

Key Benefits

- Long-range flame detector activation – at a range up to 39.3ft (12m) – a 33% increase compared to previous simulator models.
- Reduced maintenance costs with easy access for testing detectors, in hard to reach places, from floor/deck level without the need for scaffolding or ladders
- Highly portable – for hand held operation by a single operator
- Easy aiming using laser diode
- ATEX/IECEx approved for use in Zones 1 & 2, Zones 21 & 22 hazardous areas
- Single charge is sufficient to test up to 1,000 detectors

FS-1100 Flame Simulator at Work

The Spectrex flame simulator emits IR radiation in a unique pattern corresponding to, and recognizable as fire by your SharpEye Flame Detector. This allows the detector to be tested under "real" fire conditions without the associated risks of an open flame.



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ABOUT SharpEye™

The SharpEye range of Optical Flame Detectors includes a wide variety of technologies such as IR3, Multi-IR, UV/IR, all providing reliability, performance and durability. These flame detectors are equipped with a range of output options, ensuring maximum compatibility, and a wide range of approvals to ensure suitability for a variety of industries, from high risk to commercial.

Technical Specifications

The Flame Simulator Kit, Part No. 380114-1 includes the FS-1100 Flame Simulator, battery, charger and user guide TM380002 in carrying case.

SIMULATOR MODELS

Detector Types	Sensitivity Setting	Min. Testing Distance	Testing Distance
40/40I, 20/20CTIx, older models 20/20I, SI and XI	50ft (15m)	2.5ft (0.75m)	6.6ft (2m)
	100ft (30m)	2.5ft (0.75m)	19.6ft (6m)
	150ft (45m)	2.5ft (0.75m)	29.5ft (9m)
	215ft (65m)	2.5ft (0.75m)	39.3ft (12m)
40/40UFI	66ft (20m)	2.5ft (0.75m)	13ft (4m)
	133ft (40m)	2.5ft (0.75m)	26ft (8m)
	200ft (60m)	2.5ft (0.75m)	40ft (12m)
	300ft (90m)	2.5ft (0.75m)	50ft (15m)
20/20MPI, 20/20MI-1	33ft (10m)*	2.5ft (0.75m)	6.6ft (2m)* *20/20MPI only
	65ft (20m)	2.5ft (0.75m)	8.2ft (2.5m)
	100ft (30m)	2.5ft (0.75m)	19.6ft (6m)
	132ft (40m)	2.5ft (0.75m)	26.2ft (8m)

GENERAL SPECIFICATIONS

Operating Temperature	-4°F to +122°F (-20°C to +50°C)
Vibration protection	1g (10-50Hz)
Activations between charges	1,000 max.

ELECTRICAL SPECIFICATIONS

Power	14.8V (4 x 3.7V rechargeable lithium-ion battery)
Maximum current	4A
Battery capacity	2.2AH
Charging time	2hr at 2A

MECHANICAL SPECIFICATIONS

Dimensions	9 x 7.3 x 5.35" (230 x 185 x 136 mm)
Weight	5.5 lb (2.5 kg)
Enclosure	Aluminum, heavy-duty copper-free, black painting
Explosion-proof enclosure	ATEX and IECEx approved Ex II 2 G D Ex d ib op is IIB + H2 T5 Gb Ex ib op is tb IIIC T135°C Db -20°C to +50°C
TR CU (EAC)	1Ex db ib op is IIB+H2 T5 Gb X Ex ib op is tb IIIC T135°C Db X -20°C ≤ Ta ≤ +50°Cb
Water and dust tight	IP65

Specifications subject to change
For more information view manual or website www.spectrex.net

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