FS-HR-975

Flame Simulator for Rosemount™ 975HR

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.

Rosemount™ Flame Simulator

Complete End-to-End Testing Using our Flame Simulator

The FS-HR-975 Flame Simulator is the essential complimentary tool to the self-testing capabilities of your Rosemount 975HR Multi-spectrum Infrared for Hydrogen flame detector. 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 Rosemount 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-HR-975 verifies the correct operation of the Rosemount 975HR, performs an essential end-to-end loop test and verifies window cleanliness.

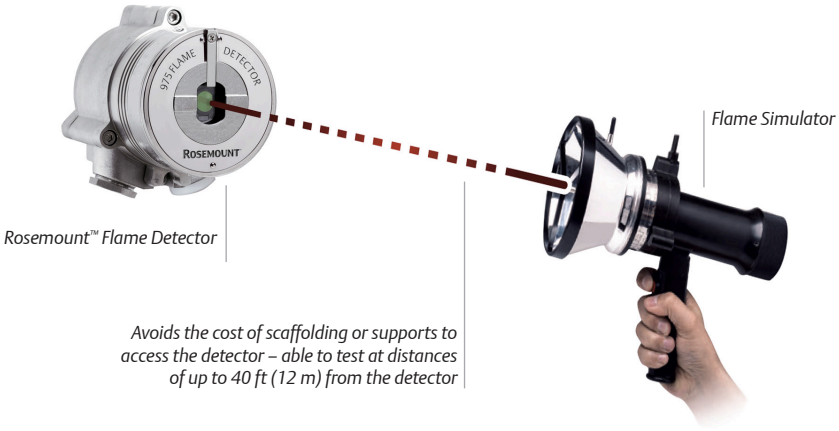
The robust and reliable FS-HR-975 Flame Simulator allows remote testing of flame detectors, which are often located in difficult to access and/or classified hazardous areas (Zones 1 & 2, Zones 21 & 22).

Features & Benefits

- Long-range flame detector activation – at a range up to 40 ft (12 m)
- 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

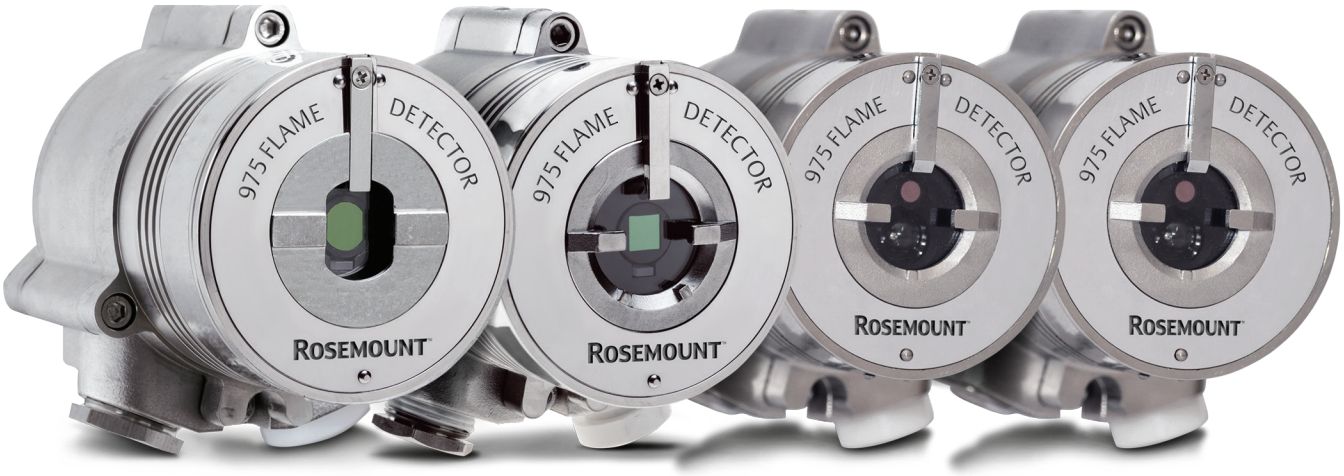
FS-HR-975 Flame Simulator at Work

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



About Rosemount™ 975 Flame Detectors

The Rosemount series of Optical Flame Detectors includes a wide variety of technologies such as Multi-spectrum Infrared, Multi-spectrum Infrared for Hydrogen and Ultraviolet Infrared, 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.



Specifications

The Flame Simulator Kit, Part No. 00975-9000-0013 includes the FS-HR-975 flame simulator, battery, charger and user guide in carrying case.

Table 1 - FS-HR-975 Flame Simulator

Simulator Models			
Detector Types	**Detector Sensitivity Setting**	**Min. Testing Distance**	**Max. Testing Distance**
975HR	50 ft (15 m) 100 ft (30 m) 150 ft (45 m) 200 ft (60 m)	2.5 ft (0.75 m) 2.5 ft (0.75 m) 2.5 ft (0.75 m) 2.5 ft (0.75 m)	6.6 ft (2 m) 19.6 ft (6 m) 29.5 ft (9 m) 40 ft (12 m)
General Specifications			
Temperature range	-4 °F to +122 °F (-20 °C to +50 °C)		
Vibration protection	1 g (10–50 Hz)		
Activations between charges	1,000 max.		
Electrical Specifications			
Power	14.8 V (4 x 3.7 V rechargeable lithium-ion battery)		
Maximum current	4 A		
Battery capacity	2.2 AH		
Charging time	2 hr at 2 A		
Mechanical Specifications			
Dimensions	9 x 7.3 x 5.35 in (230 x 185 x 136 mm)		
Weight	5.5 lb (2.5 kg)		
Enclosure	Aluminum, heavy-duty copper-free, black zinc coating		
Explosion-proof enclosure	ATEX and IECEx approved Ex II 2 G D Ex d ib op is IIB + H2 T5 Gb Ex ib tb IIIC T135 °C Db -20 °C to +50 °C (-4 °F to +122 °F)		
Water and dust tight	IP65		

EmersonProcess.com/FlameGasDetection

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