



Description

The Fireray 5000 System is an auto-aligning infrared beam smoke detector. Once the detector head is installed, using the easyfit mounting system an integral LASER can be activated that is aligned along the optical path of the infrared beam. This allows the reflective prism to be located quickly and with confidence. The AutoOptimiser beam alignment system then takes over and automatically steers and maintains the beam in the optimum position for reliable performance. The signal generated in the transmitter element and reflected by the prism back to the receiver element is analyzed for the presence of smoke.

The internal microprocessor determines an alarm condition when a predetermined level is reached. The system is designed to be mounted so the beam will project between 1ft. (0.31m) and 2ft. (0.61m) below and parallel to the ceiling. Lateral detection may be up to 30ft. (9.144m) on either side of the beam, providing a maximum total coverage area of up to 19,800 square feet (60ft. x 330ft. or 18.29m x 100m).

Features

- Range of 26.25 ft. to 330 ft. (8m to 100m)
- Modular Design
- Easyfit First Fix System
- Ground Level System Controller
- LASER Assisted Prism Mounting
- AutoOptimise Beam Alignment
- Electronic Obscuration Test
- Contamination Compensation
- Building Shift Compensation
- Separate alarm and trouble contacts
- Remote display and control unit with LCD backlight
- Password protected settings
- Current monitoring for gimbals motor position
- User feedback of operating parameters

Engineering Specifications

The projected beam type smoke detector shall be a 4-wire 24 VDC device to be used with an U.L. Listed separately supplied 4-wire control panel. Unit shall be listed to U.L. 268 and shall consist of an integrated transmitter, receiver and remote control unit. The detector shall operate between a range of 26.25 ft. to 330 ft. (8m to 100m). The temperature range of the beam shall be -4°F to 131°F (-20°C to 55°C). The beam detector shall feature automatic gain control which will compensate for gradual signal deterioration from dirt accumulation on the lenses. The Reflective Beam shall include AutoOptimise Beam Alignment feature to ensure unit is always receiving maximum signal available and shall be able to compensate for Building Shift. The unit shall include a wall mounting remote display and control unit with LCD backlight. Testing shall be carried out by using a UL approved internal obscuration test. The Reflective beam type smoke detector shall be a Fire Fighting Enterprises Fireray 5000.



Electrical Specifications

Primary Input Power

14 to 28 VDC

Standby Current

Low Current Mode: 12mA @ 24VDC

High Current Mode: 52mA @24VDC

Alarm Current

52 mA @ 24 VDC

Relay Contacts

1A at 30 VDC Resistive

Reset Time

5 Seconds maximum

Start Up Time

45 Seconds

Optical Wavelength

850nm.

Sensitivity

10% - 60% (35% Default)

Temperature Rating

-22°F to 131°F (-30°C to +55°C)

For UL Listed Installations, 32°F to 100°F (0°C to 37.8°C).

Relative Humidity

0% to 93% RH non-condensing

Range

26.25ft. to 330ft. (8m to 100m)

Cabling Between Detector & Controller

24—14 AWG 1—Pair Shielded

Construction Specifications

Housing

Flame Retardant ABS

Rating

IP54

Finish

Light Grey/Black

Weight

Head & Controller 3.24 lbs (1.47 kg)

Dimensions

Head

5.28" H x 5.31" L x 5.28" W (135mm H x 134mm L x 132mm W)

Controller

2.80" H x 9.25" L x 7.87" W (71mm H x 235mm L x 200mm W)

Prism

0.37" H x 4.13" L x 3.94" W (9.5mm H x 105mm L x 100mm W)

Ordering Information

Model	Description
5000-001	Reflective Auto Align beam smoke detector 27ft.. to 330ft. (8m to 100m). System includes One Detector Head, One Controller and One Prism.
23901	Replacement Prism
5000-004	Long Range Prism Kit - 3 Additional 23901 Prisms for installations between 160ft. and 330ft. (50m - 100m)
5000-005	Universal Alignment Bracket. Used with F-5000 Detector Head, 5000-007 and 5000-008
5000-006	Wall Bracket Mounts 1 or 4 Prisms.
5000-007	4 Prism Alignment Adaptor
5000-008	1 Prism Alignment Adaptor
5000-009	Controller Back Box
5000-010	Semi-Flush Trim Plate for 5000-009
5000-011	Detector Back Box
5000-012	Cover Plate for 5000-011
5000-014	Ceiling Pendant Mount Bracket

NOT TO BE USED FOR INSTALLATION PURPOSES.



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