


F5000 Projected Beam Smoke Detector

Features

- Range of 26.25 ft. to 330 ft. (8m to 100m)
- Modular Design
- *Easyfit* Mounting System
- Ground Level System Controller
- LASER Assisted Prism Mounting
- *AutOptimise* 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
-  UL Listed, CSFM approved



Description

The F5000 Reflective Beam Detector 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 *AutOptimiser 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 or 1,829 square meters (60ft. x 330ft. or 18.29m x 100m). The F5000 detectors can interface with Faraday MPC-6000 and MPC-7000 fire alarm panels via the 8702 or 8705 modules.

Engineering Specification

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. Shall be powered by any UL category UTRZ power supply, such as the RSE-300. 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 listed internal obscuration test. The Reflective beam type smoke detector shall be a Fire Fighting Enterprises Fireray 5000.

Specifications

Construction Specification

Housing:	Flame Retardant ABS
Finish:	Light Grey/Black
Weight:	Head & Controller 3.24 lbs (1.47 kg)
Dimensions:	5.28" H x 5.31" L x 5.28" W
Head:	(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)

Electrical Specification

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% obscuration (% per foot) Default value = 35% obscuration (% per foot)
Temperature Rating:	-22°F to 131°F (-30°C to +55°C) <i>For UL Listed Installations, 32°F to 100°F (0°C to 37.8°C).</i>
Relative Humidity:	0% to 93% RH non-condensing
Range:	26.25ft. to 330ft. (8m to 100m)

Ordering Information

Model	Part	Description
F5000	500-050261	Reflective beam smoke detector
23901	500-050269	Replacement prism for F5000
5000-004	500-050270	Long range prism kit
5000-005	500-050273	Surface mount universal bracket for F5000
5000-006	500-050274	Surface mount wall bracket for prisms
5000-007	500-050275	4 prism alignment adaptor for use with 5000-005
5000-008	500-050276	1 prism alignment adaptor for use with 5000-005
5000-009	500-050277	F5000 controller back box
5000-010	500-050278	Semi-flush trim plate for controller back box
5000-011	500-050279	F5000 Detector back box
5000-012	500-050280	Cover plate for 5000-011 detector back box
5000-014	500-050281	Ceiling pendant mount universal bracket for F5000, F2000
5000-017	500-050282	F5000 Detector Wire Cage



Siemens Building Technologies, Inc.
8 Fernwood Road • Florham Park, NJ 07932
Tel: (973) 593-2600 • Fax: (973) 593-6670
Web: www.faradayfirealarms.com