Advanced

Axis AX

FIRERAY® 5000

The FIRERAY® 5000 System is an auto-aligning, self-correcting infrared beam smoke detector. Up to 2 detector heads can report to a single ground level controller. In addition, each system controller houses two pairs of fire and trouble relays, one per detector. Once the detector head is installed, using the easy-fit mounting system an integral LASER can be activated. This allows the reflective prism to be located quickly and with confidence.

The Auto-Align function ensures proper alignment and maximum signal during the beam installation. Auto-Optimise 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 obscuration is reached.

The system is designed to be mounted so the beam will project between 19” (0.5m) and 24” (0.6m) below 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 (8 m to 100 m)
- Built-in Laser Assisted Prism Mounting
- Auto-Optimise: Auto-Correction Due to Building Shift
- Contamination Compensation
- Programmable Alarm Thresholds: 10% - 60% in 1% Increments
- Separate Trouble and Alarm Relays for Each of the 2 Channels
- Password Protected Settings
- Low Current Draw 5 to 8.5 mA
- Built-in 1/2” (M-20) Conduit Knockouts on System Controller
- Programmable Fault and Alarm Delay: 2 - 30 SecondsUp to 2 Detector Heads Reporting to one Ground Level Controller
- Built-in Electronic UL/ULC/FM Obscuration-Acceptance Fire Test

Listings and Approvals

- UL and ULC Listed: S3417
- FM Approved
- CSFM: 7260-1508:104
- MEA - 22-08-E

Specification

Primary Input Power:	14 to 36 VDC
Standby Current: Low Current Mode High Current Mode	 Low current mode: 5 mA to 8.5 mA @ 24 VDC (Depending on number of detector heads used) 37 mA @ 24 VDC
Alarm Current:	5 mA to 8.5 mA @ 24 VDC (Depending on number of detector heads used)
Relay Contacts:	1 A @ 30 VDC resistive
Reset Time:	5 seconds maximum
Start-Up Time:	45 seconds
Optical Wavelength:	850 nm
Alarm Threshold:	10% - 60% (35% default)
Temperature Rating: UL Listed Installations	-40ºF to 131ºF (-20ºC to 55ºC) 32ºF to 100ºF (0ºC to 38ºC)
Relative Humidity:	0% to 93%, Non-condensing
Range:	26.25 ft. to 330 ft. (8 m to 100 m)
Cabling Between Each Detector & Controller:	18 - 14 AWG, 1-pair
Housing:	Flame retardant ABS
IP Rating:	IP54
Finish:	Light grey/black
Knockouts: Controller Detector Head	
Controller	7 - 1/2” (M-20)
Detector Head	1 - 1/2” (M-20)
Weight:	Head & controller 3.24 lbs (1.47 kg)
Dimensions: Head Controller Prism	 5.28” deep x 5.16” high x 5.28” wide (134 mm x 131 mm x 134 mm) 3.43” deep x 9.06” high x 7.95” wide (87 mm x 230 mm x 202 mm) 0.37” deep x 4.13” high x 3.94” wide (9.5 mm x 105 mm x 100 mm)

Order Codes and Options

5000-103	Reflective Auto Align Beam Smoke Detector, 27 ft to 330 ft system includes 1 detector head, 1 controller and 1 prism
5000-031	Additional Detector Head and 1 prism use up to 1 additional detector head per 5000-103
5000-004	Long Range Prism Kit, 3 additional prisms for installations between 160 ft and 330 ft (50 m - 100 m)
5000-005	Universal Alignment Bracket used with F-5000 detector head, 5000-007 and 5000-008
5000-201	Universal 1300 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 Plate
5000-008	1 Prism Alignment Adaptor Plate
5000-009	Controller Back Box
5000-010	Semi-Flush Trim Plate for 5000-009
5000-011	Detector Surface Mount Uni-Box
5000-012	Detector 2 Gang Mounting Plate
5000-014	Ceiling Pendant Mount Bracket
1000-018	Wire Protective Cage for detector
1000-019	Wire Protective Cage for controller

23901	Replacement Prism

Advanced, The Bridges, Balliol Business Park, Newcastle upon Tyne, NE12 8EW, UK T: +44 (0)345 894 7000 E: enquiries@advancedco.com
W: www.advancedco.com

As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice.