Advanced

Axis EN

Fireray 5000 Beam Detector

The FIRERAY 5000 motorised reflective, auto aligning infrared optical beam smoke detector can be installed with up to two detector heads per system, thus saving on installation time and costs. In addition, each system controller houses two pairs of fire and fault relays, one per detector. This innovative system has been designed from the ground up to include pioneering technology that fully addresses the needs of the installer and user, both now and in the future.

With its industry leading optics, the 5000 is ideally suited for the protection of large areas where the use of traditional detection technologies would prove to be too difficult and/or costly to install.

The 5000 combines an infrared transmitter and receiver in the same discrete unit and operates by projecting a well-defined beam to a reflective prism, which returns the beam to the receiver for analysis. Smoke in the beam path causes a drop.



Approvals

- Approved to EN54-12 and UL268

Features

- Allows for 2 Detectors per System Controller
- Each Detector configurable from 8m to 100m
- Separate Fire and Fault relays per Detector
- Building Movement and Contamination Compensation
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- 20mm Cable Gland Knockouts on System Controller
- Integral LASER alignment
- Low Level System Controller

Specification

Parameter	Min.	Typ.	Max.	Unit
Operating Voltage (to System Controller)	14	-	36	VDC
Operating Current (constant) - with 1 detector	5	5.5	6	mA
Operating Current (constant) - with 2 detectors	7.5	8	8.5	mA
Operating Current (constant) - alignment modes, with 1 or 2 detectors	35	36	37	mA
Response Threshold/ Sensitivity (Default 35%)	0.45 10	- -	3.98 60	dB %
Delay to Alarm – user settable (Default 10 sec)	2	-	30	sec
Delay to Fault – user settable (Default 10 sec)	2	-	30	sec
Operating distance (separation) *	8	-	100	m
Maximum angular alignment of detector	-	-	+/-3.5	Deg
Optical wavelength		850		nm
Fault level/ Rapid obscuration (2 sec)	-	-	87	%
Operating temperature	-10	-	+55	Deg C

Storage temperature	-40	-	+85	Deg C
Relative humidity (non condensing)	-	-	93	%
IP rating		54		-
Contact Voltage - Fire & Fault relays (VFCO)	0.1	-	36	VDC
Contact Current - Fire & Fault relays (VFCO)	0.1	-	100	mA
Cable length - System Controller to Detector (2 core)	-	-	100	m
Cable gauge	24	-	14	AWG
	0.5	-	1.6	mm
Housing flammability rating	UL94V0			
CPD Reference	0832-CPD-0565			
UL File	S3417			

Dimensions and Weight	Width(mm)	Height (mm)	Depth (mm)	Weight (kg)
System Controller, including base:	202	230	87	1.0
Detector, including ‘easy fit’ base:	134	131	134	0.5
Reflector:	100	100	10	0.1

Operation

Getting the system operational is simplified by a number of groundbreaking features that combine to make the 5000 the quickest and easiest detector of its type to install.Each detector takes under 5 minutes to fully align. A full range of installation accessories are available including the newAdjustment Bracket,which allows a greater degree of flexibility during installation.

Once the detector heads are connected,using the First Fix system,an integral LASER can be activated.This allows the reflective prism to be positioned quickly and with confidence. Once the LASER has been used to coarsely align the beam, Auto- Align takes over and automatically steers the beam into the optimum position.During alignment the system automatically switches to high current mode and drops back to low current mode when in normal operation,however,alignment is still possible in low current mode.

Mounting Instructions

Please refer to our User Guide (UG) for mounting and wiring instructions.The installation of the infrared optical beam smoke detector should be undertaken in accordance with recognised national or international standards and codes of practice.

Specifications and wiring information are provided for information only and are believed to be accurate. Advanced assumes no responsibility for their use. Data and design are subject to change without notice. Installation and wiring instructions are shipped with the products and should always be used for actual installation. For more information,contact your Sales Representative.

Order Codes and Options

08-5000-101	FIRERAY 5000 System (50m)
08-5000-102	FIRERAY 5000 System (100m)
08-5000-002	FIRERAY 5000 Single Detector pack (50m)
08-5000-039	FIRERAY 5000 Single Detector pack (100m)
08-5000-005	FIRERAY 5000 Prism Wall Bracket (for detector head or prism plate)
08-5000-008	FIRERAY 5000 Prism Plate for single prism (not included)

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