

Fireray 5000 Motorised Reflective Auto-Aligning Beam Smoke Detector

The Fireray 5000 motorised reflective, auto aligning infra-red beam smoke detector can be installed with up to two detector heads per system, saving on installation time and costs. Each system controller houses two pairs of fire and fault relays, one per detector.

The Fireray 5000 combines an infra-red 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 in power, which, if below a pre-determined level, results in an alarm signal.

With its industry-leading optics, the Fireray 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.



FIRERAY 5000 DETECTORS

5000-101	Fireray 5000 [EN] 50 m (164 ft)
5000-102	Fireray 5000 [EN] 100 m (328 ft)
5000-112	Fireray 5000 [NF] 50 m (164 ft)
5000-113	Fireray 5000 [NF] 100 m (328 ft)
5000-103	Fireray 5000 [UL/FM] 50 m (164 ft)
5000-104	Fireray 5000 [UL/FM] 100 m (164 ft)

FEATURES

Allows for 2 Detectors per System Controller
Each Detector configurable from 8m to 100m
Separate Fire and Fault relays per Detector
Integral laser alignment
Auto-align fast automatic beam alignment
Contamination compensation
Low level system controller
Logs the 50 most recent events per Detector
Programmable sensitivity and fire thresholds
20mm cable gland knockouts on System Controller
2-wire interface from System Controller to Detector
Working optical path for Detector alignment

APPROVALS

World-wide approvals include EN54:12 and UL268. Visit our website for up to date approvals information.

Operation

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

Once the detector heads are connected, using the Easifit 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.

ACCESSORIES

1010-000	Fireray Prism (Long Range)
5000-005	Fireray Universal Bracket
1170-000	Fireray Detector Adjustment Bracket
5000-204	Fireray Anti-Condensation Heater
1000-018	Fireray Protective Wire Cage
1000-019	Fireray Controller Protective Cage

SCAN THE QR CODE
TO EXPLORE THE
FIRERAY PRODUCT RANGE



Fireray 5000

Motorised Reflective Auto-Aligning Beam Smoke Detector

Datasheet

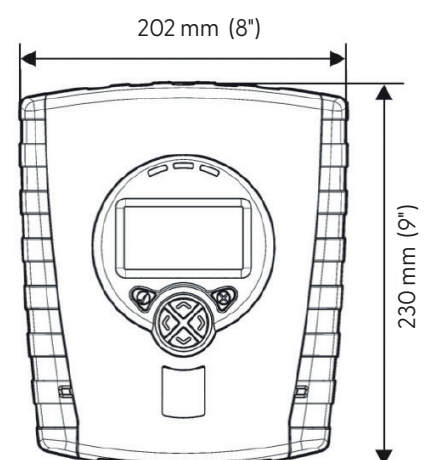
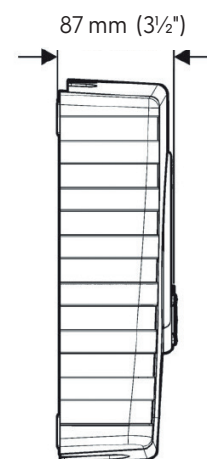
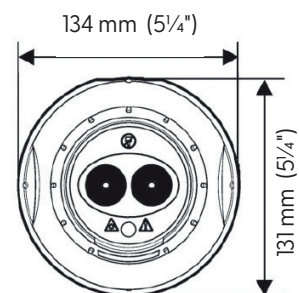
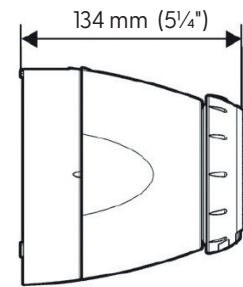
TECHNICAL SPECIFICATION	Min.	Typ.	Max.	Unit.
Operating voltage (to System Controller)	14	-	36	VDC
Operating current (constant) – with 1 Detector	5	5.5	6	mA
Operating current (constant) – with 2 detectors	7.5	8	8.5	mA
Operating current (constant) – alignment modes, with 1 or 2 Detectors	35	36	37	mA
Response 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	°
Optical wavelength 850 nm				
Fault level/ rapid obscuration ($\Delta \leq 2$ sec)	-	-	87	%
Operating temperature	-10 +14	0 0	+55 +131	°C °F
Storage temperature	-40 -40	- -	+85 +185	°C °F
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
	-	-	3/4	ft
Cable gauge	24	-	14	AWG
	0.5	-	1.6	mm
	1/100	-	6/100	inch
Housing flammability rating	UL94 V0			
CPR reference	0832-CPR-F0390			
UL file	S3417			

DIMENSIONS & WEIGHT		Width	Height	Depth	Weight
System Controller including base	(mm/kg) (inches/lb)	202 8	230 9	87 3 1/2	1 2 1/4
Detector, including 'easy fit' base	(mm/kg) (inches/lb)	134 5 1/4	131 5 1/4	134 5 1/4	0.5 1
Reflector	(mm/kg) (inches/oz)	100 4	100 4	10 1/2	0.1 3 1/2

All figures are quoted for 25°C

* 4 Reflectors required for > 50 m operation

Please refer to the User Guide (UG) for mounting, wiring and commissioning instructions. The installation of the Fireray 5000 infra-red beam smoke detector should be undertaken in accordance with the recognised national, or international, standards and Codes of Practice (COP).



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Specifications and wiring information are provided for information only and are believed to be accurate. FFE Ltd 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.
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