

FIRERAY® 3000

The FIRERAY® 3000 End to End infrared Optical Beam Smoke Detector (OBSD) has been designed using the latest optical technology, incorporating modern industrial, electronic and software techniques. This detector offers cost effective protection of large, open area spaces with high ceilings. It is also very suited to applications where access to ceiling mounted smoke detectors presents practical difficulties.

The FIRERAY® 3000 is ideal for applications where line of sight for the IR (infra-red) detection path is narrow and where the building structure uses reflective surfaces. It has also been designed to be aesthetically pleasing and thus can equally suit modern architectural buildings as well as historical sites, particularly where ornate ceilings exist.

Features

- Separate Transmitter and Receiver Heads
- Range 16.5 to 393 Feet (Configurable per set of detectors)
- Integrated Laser Alignment in Receiver
- 2-wire Interface Between Controller and Receiver
- Single and Twin Channel Capability
- Separate Fire and Fault Relays per Detector
- Low Level Controller with LCD Display
- Programmable Sensitivity and Fire Threshold
- Automatic Gain Control (AGC) for Drift Compensation
- Built-in Electronic UL/ULC Obscuration-Acceptance Fire Test
- Knockouts for Ease of Installation and Wiring
- Optional Transmitter Powering from Controller

Listings and Approvals

- UL and ULC Listed: S3417
- CSFM: 7260-1508:105

Specification

Operating Range:	16.5 to 393 feet (5-120 m)
Operating Voltage Range:	12 to 36 VDC $\pm 10\%$
Operating Controller Current (With 1 or 2 Receivers):	14 mA (Constant)
Operating Transmitter Current:	8 mA (per Transmitter)
Power Down Reset Time:	>20 seconds
Fire and Fault Relay Contacts:	Resistive VFCO 2A @ 30 VDC
Operating Temperature (UL):	-40°F to 131°F (-20°C to 55°C)
Optical Wavelength:	850 nm
LED Indications:	
Control Unit:	Red = Fire Amber = Fault Green = System ok
Receiver:	Red = Fire
	Alignment LEDs for single person alignment
IP Rating:	IP54
Relative Humidity (Non-Condensing):	93%
Parts List:	
System:	1 x Transmitter (Clear lens) 1 x Receiver (Dark lens) 1 x Control unit
Additional Detector:	1 x Transmitter (Clear lens) 1 x Receiver (Dark lens)
Housing Material (Transmitter/Receiver/Controller):	UL94V2 PC
Cabling between each Receiver & Controller:	18-14 AWG, 1-pair, twisted jacketed
Maximum Cable Distance between Receiver & Controller:	330 feet (100 m)
Dimensions & Weight:	
Control Unit:	7.99" wide x 4.88" high x 2.81" deep, 1.34 lbs
Transmitter & Receiver:	3.07" wide x 3.03" high x 6.33" deep, 0.456 lbs

Order Codes and Options

3000-103	FIRERAY® 3000 End to End Beam Smoke Detector, 16.5 ft to 393 ft system includes 1x transmitter, 1x receiver, and 1x system control unit
3000-016	Additional Detector Pack (set of Transmitter and receiver heads) use up to 1 additional detector pack per 3000-103
3000-201	FIRERAY® 3000 Adjustment Bracket
3000-202	FIRERAY® 3000 Surface Mount Adaptor
3000-203	FIRERAY® 3000 4" Square Cover Plate
5000-011	FIRERAY® 3000 Surface Mount Detector Back Box (Requires one 3000-202 surface mount adaptor for each head - ordered separately)
3000-209	FIRERAY® 3000 Controller Back Box
3000-210	FIRERAY® 3000 Semi Flush Trim Plate
1000-018	Wire Cage for FIRERAY® 3000 when used with the 5000-011 detector back box and 3000-202 (ordered separately)

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