



# Fireray® 50/100RU

## Reflective Optical Beam Smoke Detector

The Fireray® 50/100RU system is a reflective beam smoke detector, which comprises of a single unit incorporating an infra-red transmitter and receiver. 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 product is designed to be mounted so the beam will project between 19" (0.5 m) and 24" (0.6m) 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 (60ft. x 330ft. or 18.29m x 100m). For installations complying with UL268/NFPA72, the maximum distance of Detector and Reflector from the ceiling must be 10% of the distance between floor and ceiling.

### Engineering Specification

The projected beam type smoke detector shall be a 4-wire 12/24 VDC device to be used with a separately supplied 4-wire control panel. The OBSD shall be listed to U.L. 268 and shall consist of an integrated transmitter and receiver. The detector shall operate between a range of 16.5 ft. to 330 ft. (5m 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 unit shall be capable of mounting directly to the wall or to a surface back box. Testing shall be carried out by using a calibrated obscuration test filter. The Reflective beam type smoke detector shall be a FFE Ltd. Fireray® 50RU (16.5ft-60ft / 5m-50m) or 100RU (160ft-300ft / 50m-100m).

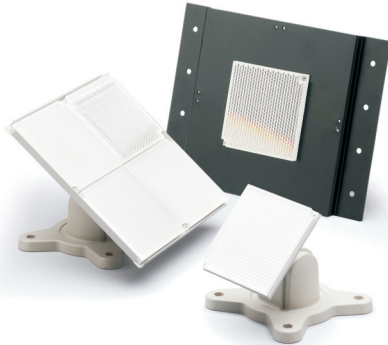


### Features

- 2 Models based on coverage:
  - 16.5 ft. to 160 ft. (5m to 50m) 50RU
  - 160 ft. to 330 ft. (50m to 100m) 100RU
- Easy set up and alignment
- Single compact housing
- Calibrated obscuration test filter included
- 3 selectable alarm thresholds: 25%, 35% or 50%
- Microprocessor controlled
- Alarm latching or auto reset
- Automatic gain control
- 12 VDC or 24 VDC operation
- Separate alarm and trouble contacts
- Remote Test Station available



Fireray® 50RU/100RU  
Accessories



## Construction Specification

Housing:	Flame Retardant ABS
IP Rating:	IP50
Finish:	Grey/Black
Weight:	1.5 lbs (0.68 kg)
Dimensions:	8.25" H x 4.5" D x 4.75" W (210mm H x 114.3mm D x 120mm W)

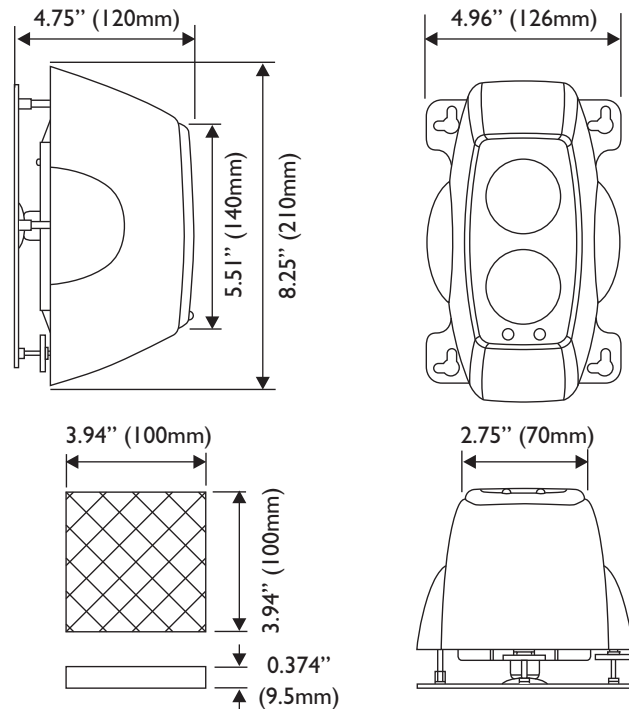
## Electrical Specification

Primary Input Power:	10.2 to 30 VDC
Standby Current:	4mA @ 24VDC
Alarm Current:	15 mA @ 24 VDC
Relay Contacts:	1A at 30 VDC Resistive
Reset Time:	5 Seconds maximum
Start Up Time:	10 Seconds
Optical Wavelength:	880nm.
Alarm Threshold:	25%, 35%, 50%
Temperature Rating:	-4°F to 131°F (-20°C to +55°C) For UL Listed Installations, 32°F to 100°F (0°C to 38°C).
Relative Humidity:	10% to 93% RH non-condensing
Range:	50RU 16.5-160 ft. (5m-50m) 100RU 160-330 ft. (50m-100m)

## Listings

- UL - S3417
- ULC - S3417
- MEA - 70-02-E
- CSFM - 7260-1508-102
- MEA - 70-02-E
- Maryland - 2243

## Dimensions



## Ordering Information

- 50RU Reflective beam smoke detector 16.5ft-160ft. (50m) (0206-02)
- 100RU Reflective beam smoke detector 160ft-330ft. (100m) (0206-03)
- LLC Remote Test Station (0400)
- 0608 Surface Mount Back Box for 50RU/100RU Beam Detectors
- 0893 Surface Mount Wall Bracket for 50RU/100RU Beam Detectors
- 0209 Obscuration Test Filter
- 23901 Replacement Prism
- 5000-005 Alignment Bracket Base for 5000-007 and 5000-008
- 5000-006 Prism Wall Bracket
- 5000-007 4 Prism Alignment Bracket
- 5000-008 1 Prism Alignment Bracket
- 5000-014 Ceiling Pendant Mount Bracket
- 1000-020 Wire Protective Cage



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