



HARRINGTON
SIGNAL INC.
FIRE ALARM

Model 50RU/100RU

Reflective Beam Smoke Detector

Harrington Signal Inc.
2519 4th Avenue, Moline, Illinois 61265
P.O. Box 590, Moline, Illinois 61266-0590
Phone: (800) 577-5758 Local: (309) 762-0731 Fax: (309) 762-8215
Internet: www.harringtonfire.com



Description

The system is a single unit incorporating an infrared Transmitter and Receiver. The signal is reflected by a prism and analyzed for smoke presence. Should a pre-determined level be reached, a fire condition is activated. The system is designed to be mounted so that the beam will project between 1 ft. and 2 ft. below and parallel to the ceiling. Lateral detection may be up to 30 ft. either side of the beam, providing a maximum total coverage area of up to 19,800 Sq ft.

Features

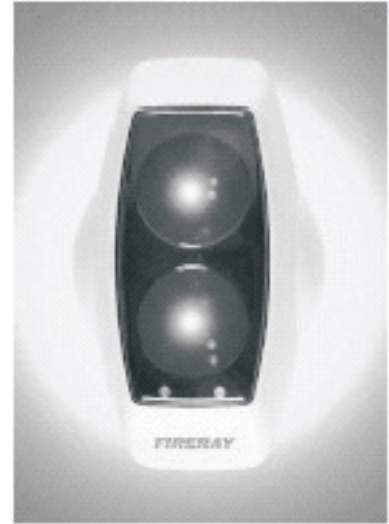
- Microprocessor Controlled
- Model 50RU Range 15 - 160 feet (5m to 50m)
- Model 100RU Range 160 - 330 feet (50m to 100m)
- Single Compact Housing
- Unique Simple Alignment
- 12 VDC or 24 VDC Operating Voltage
- Latching / Non Latching Alarm
- Reflector Targeting Mode

- Integral Alignment Aid
- Selectable Alarm Thresholds
- Low Current Consumption
- Self Check and Automatic Drift Compensation
- Automatic Reset
- Can be mounted vertically or horizontally
- Automatic Contamination Compensation
- Flame Retardant ABS Housing
- Dimensions: 8-1/4" x 4-1/2" x 4-3/4"

Ideal for open areas where ceiling heights exceed 25 feet

Smoke Detector Spacing

On smooth ceilings, up to 60 feet between projected beams and not more than one-half that spacing between a projected beam and a sidewall. Other spacing may be used depending on ceiling height, airflow characteristics, and response requirements. See NFPA 72.



Ordering Information

Model Number	Part Number	Description
50RU	FFE-50R	Reflective beam smoke detector, operating range 15 to 160 feet
100RU	FFE-100R	Reflective beam smoke detector, operating range 160 to 300 feet



Architect & Engineer Specifications

The projected beam type smoke detector shall be a 4-wire 12/24 VDC device to be used with UL listed 4-wire control panels only. Unit shall be UL 268 listed and shall consist of an integrated transmitter and receiver. The detector shall operate between a range of 15 - 330 feet. The temperature range of the beam shall be -22°F to 131°F. The beam detector shall feature automatic gain control which will compensate for gradual signal deterioration from dirt accumulation on lenses. The unit shall include a wall mounting bracket. Testing shall be carried out using a calibrated test filter.

Technical Specifications

Operational:

- Range 50RU..... 15 ft. to 160 ft. (5m to 50m)
- Range 100RU..... 160 ft. to 330 ft. (50m to 100m)
- Sensitivity 25% 35% 50%
- Fault Condition (Trouble) 90% or more obscuration, Automatic gain control limit, Improper initial alignment
- Integrated Alignment AidReflector targeting mode
- Alarm indicator Local red LED
- Trouble indicator Integral green LED
- Test / Reset Features Obscuration filter, Automatic reset
- Relays Alarm, trouble

Environmental:

- Temperature -22° F to 131° F (-30° C to 55° C)
- Humidity 10 - 93% RH noncondensing

Electrical (Receiver):

- Voltage 10.2 or 30 VDC maximum
- Standby Current 4mA @ 24VDC maximum
- Alarm Current 15mA @ 24VDCmaximum
- Trouble Current 15mA @ 24VDCmaximum
- Relay Contacts Current 1A at 30 VDC Resistive
- Reset Time 5 second maximum
- Start-up Time 10 seconds

NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information are provided with the product and are available from Harrington Signal Inc. Fire Alarm. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact Harrington Signal Inc. Harrington Signal Inc. Fire Alarm reserves the right to change specifications without notice. Quality manufactured for Harrington Signal by F.F.E.