



by Honeywell

Description

The Fire Ray is a new generation of the reflective beam smoke detector. The Fire Ray incorporates both an infrared transmitter and receiver in one wall-mounted unit.

The infrared beam generated by the transmitter is reflected back to the receiver by means of a prism mounted on the opposite wall. The unit monitors the reflected beam for any obscuration caused by smoke. If a predetermined level of obscuration is reached, the Fire Ray beam detector initiates an alarm condition by means of a set of alarm dry contacts connected to the monitoring fire alarm control panel.

This unique design eliminates the need to run wire between a transmitter and a separate, remotely mounted receiver. This construction further facilitates ease of installation by making it possible for a single individual to align the device.

Two versions of the Fire Ray beam smoke detector are available.

- The Fire Ray 50RU can project its beam between 15 ft. (5 m) and 160 ft. (50 m).
- The Fire Ray 100RU has a range of 160 ft. (50 m) to 330 ft. (101 m).

Both units allow field selectable sensitivity settings of 25%, 35%, or 50% obscuration.

Each unit includes a wall mounted bracket and can be either vertically or horizontally oriented. It projects its beam between 1 ft. (.3 m) and 2 ft. (.7 m) below and parallel to the ceiling. Lateral detection can be as wide as 30 ft. (9.1 m) on either side of the beam. The device is a four wire detector and is designed to operate within a temperature range of -22° to 131° F (-20° to 55° C).

The Fire Ray beam detector is suitable for any open area where ceiling height exceeds 25 ft. such as auditoriums, warehouses, gymnasiums, etc. Its compact and unobstrusive design makes the Fire Ray beam smoke detector ideal for shopping malls, libraries, hotel atriums, theaters, churches, etc. where appearance is important.

Fire Ray Beam Detector



Fire Ray Beam Detector

Features

- Single compact housing.
- No wiring between transmitter and receiver required.
- Ease of installation and beam alignment with integral alignment aid.
- Automatic gain control to compensate for gradual dust buildup.
- Latching or non-latching alarm option.
- Microprocessor controlled.
- Low current consumption.
- 12-24 VDC operating voltage.
- Field-selectable sensitivity settings of 25%, 35%, or 50% per ft. obscuration.
- Ranges:

50RU - **15 ft. to 160 ft.** (5m to 50m) 100RU - 160 ft. to 330 ft. (50m to 100m)

- Alarm and trouble dry contacts.
- Red alarm Indicating LED.
- Amber trouble indicating LED.

An ISO 9000-2000 Company





7002-F 7260-1508:102

On smooth ceilings, the Fire Ray beam smoke detector may be spaced up to 60 ft. between projected beams and not more than one-half that spacing between a projected beam and a side wall. Other spacing may be used depending on ceiling height, airflow characteristics, and response requirements. See NFPA 72, the National Fire Alarm Code, for more information.

Specifications

Ranges: 50RU Range:

15 ft. to 160 ft. (5m to 50m)

100RU Range:

160 ft. to 330 ft. (50m to 100m)

Sensitivity: 25%, 35%, or 50%

Operating Voltage: 10 to 30 VDC, 10.2-30 VDC

Standby Current: 4 mA maximum
Alarm Current: 14 mA maximum
Trouble Current: 14 mA maximum

Alarm & Trouble Relay

Contact Ratings:0.5 A @ 30 VAC/DCReset Time:5 seconds maximumStart-up Time:10 seconds maximumOperating Temperature:-22° F to 131° F

(-20° C to 55°C)

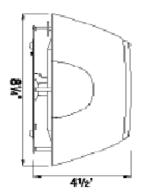
For UL Listed installations: 32° F to 100° F (0° C to 38° C)

Relative Humidity: 10-93% non-condensing Dimensions: 8¼" H x 4½" D x 4¾" W

(21 H x 11.5 D x 12 D cm)

Weight: Approximately 1.5 lbs. (0.7 kg)

Fire Ray Beam Detector



Ordering information

Part Number Description

112-90032 Fire Ray 50RU

Fire Ray Beam Smoke Detector

15 ft. to **160** ft. (5m to 50m)

112-90033 Fire Ray 100RU

Fire Ray Beam Smoke Detector 160 ft. to 330 ft. (50m to 100m)

112-90034 23901

Replacement Prism Reflector