

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 a receiver in one wall-mounted unit.

The infrared beam generated by the transmitter is reflected back to the receiver by way 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 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.

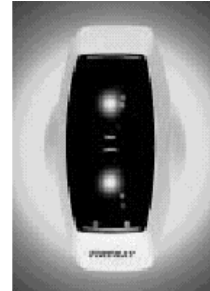
- The Fire Ray 50RU can project its beam between 15 ft. (5 m) and 160 ft. (50 m).
- The Fire Ray 100RU has a range of 160 ft. (50 m) to 330 ft. (101 m).

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

Each unit includes a wall-mounted bracket and the unit can be installed either vertically or horizontally. It projects its beam between 1 ft. (.3 m) and 2 ft. (.7 m) below and parallel to the ceiling. Lateral detection can project as wide as 30 ft. (9.1 m) on either side of the beam. The device is a four-wire detector and it 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 the ceiling height exceeds 25 ft. such as, auditoriums, warehouses, gymnasiums, etc. Its' compact and unobtrusive design makes the Fire Ray beam smoke detector ideal for use in shopping malls, libraries, hotels, atriums, theaters, and churches.

## Fire Ray Beam Detector



Fire Ray Beam Detector

## Features

- Installed in a single compact housing.
- Eliminates the need to wire between the transmitter and the receiver.
- Designed with ease of installation and beam alignment with integral alignment aid.
- Equipped with an automatic gain control to compensate for gradual dust build-up.
- Provides latching or non-latching alarm options.
- Controlled by a Microprocessor.
- Uses low current consumption.
- Has 12-24 VDC operating voltage.
- Allows field-selectable sensitivity settings of 25%, 35%, or 50% per ft. obscuration.
- Projects beam ranges:
  - 50RU
  - 100RU
  - 15 ft. to 160 ft. (5m to 50m)
  - 160 ft. to 330 ft. (50m to 100m)
- Includes alarm and trouble dry contacts.
- Offers the following indicating LEDs:
  - Red Alarm
  - Amber Trouble

SIGNALING



MEA  
Approved  
FDNY:  
COA # 7002-E

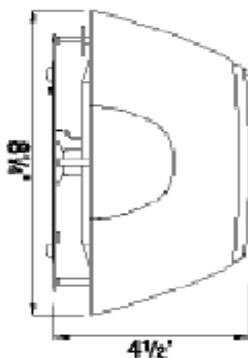
## Description (Continued)

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 the ceiling height, the airflow characteristics, and the response requirements. For additional information, refer to NFPA 72, the National Fire Alarm Code.

## Specifications

<b>Ranges:</b>	50RU Range: 15 ft. to 160 ft. (5m to 50m) 100RU Range: 160 ft. to 330 ft. (50m to 100m)
<b>Sensitivity:</b>	25%, 35%, or 50%
<b>Operating Voltage:</b>	10 to 30 VDC, 10.2-30 VDC
<b>Standby Current:</b>	4 mA maximum
<b>Alarm Current:</b>	14 mA maximum
<b>Trouble Current:</b>	14 mA maximum
<b>Alarm &amp; Trouble Relay</b>	
<b>Contact Ratings:</b>	0.5 A @ 30 VAC/DC
<b>Reset Time:</b>	5 seconds maximum
<b>Start-up Time:</b>	10 seconds maximum
<b>Operating Temperature:</b>	-22° F to 131° F (-20° C to 55° C) For UL Listed installations: 32° F to 100° F (0° C to 38° C)
<b>Relative Humidity:</b>	10-93% non-condensing
<b>Dimensions:</b>	8¼" H x 4½" D x 4¾" W (21 H x 11.5 D x 12 D cm)
<b>Weight:</b>	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

### GAMEWELL-FCI