

## Product Overview

This device can be installed easily and quickly by a single person in single point of wiring & commissioning. It has special feature to compensate automatically for natural building movement to continuously maintaining alignment by building movement tracking technology.



## Salient Features

- Auto alignment
- Easy Installation
- Standalone Detector

## Features

- UL approval
- Alignment mode switch, alignment directional buttons and configuration switches for alarm response threshold
- 2 Green LEDs and 1 Yellow LED for alignment status.
- System status : Green LED flashing every 10 sec in normal condition  
Red LED flashing every 10 sec in alarm condition  
Yellow LED flashing every 10 sec for obscuration or every 5 sec for contamination in Fault condition
- Flat front face with enclosed optics. Cleaning the optics does not affect alignment.

## Specifications

Operating voltage	: 14 to 36 VDC
Operating current	: All operational modes – 5mA; Fast alignment mode – 33mA
Operating temperature	: -20 to +55°C
Storage temperature	: -40 to +85°C
Relative humidity (non-condensing or icing)	: 0 to 93%
IP rating	: Ip55
Housing flammability rating	: UL94 V0 polycarbonate

## Optical Specifications

Fault level / Rapid obscuration ( $\Delta \leq 2$ seconds)	: $\geq 85\%$
Maximum angular misalignment of Reflective Detector	: $\pm 0.5^\circ$
Maximum angular misalignment of Reflector	: $\pm 5^\circ$
Maximum angular alignment of Reflective Detector	: $\pm 4.5^\circ$ ( $\pm 70^\circ$ with adjustment bracket accessory)

## Detection Performance

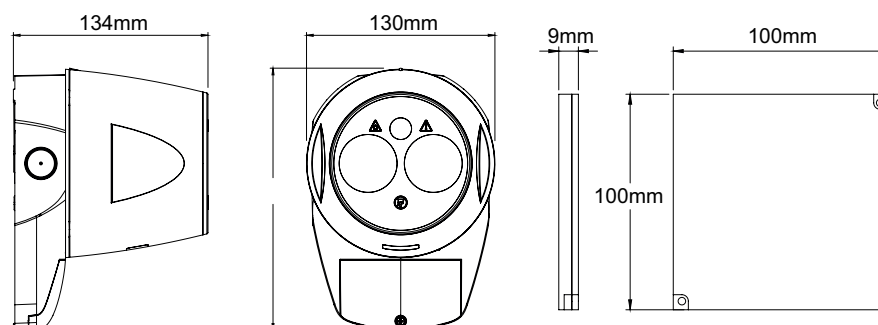
Detection range	: 0 to 50m 0 to 120m with Reflective Long Range Kit
Alignment method	: Laser assisted, Auto-Alignment™. Manual alignment – optional setting
Auto-Alignment™ protocol	: Background check, Box search, Adjust and Centre
Building Movement Tracking™	: Compensates for natural shifts in alignment from building movement*
Contamination Compensation	: Compensates for gradual build-up of contamination on the optical surfaces
Light Cancellation Technology™	: Compensates for high levels of sunlight and artificial lighting
Optical wavelength – smoke detection	: 850nm near infrared (invisible)
Integrated laser – laser alignment	: 650nm visible. Class IIIa <5mW
Dynamic Beam Phasing	: Allows beam detectors to be mounted facing each other with the reflectors in the middle. Eliminates false alarms caused by crosstalk between beams
Signal output	: Individual Alarm and Fault relays (VFCO) 2A @ 30 VDC

## Programmable User Settings

Alarm response threshold levels	: 25% (1.25dB) – Fastest response to smoke 35% (1.87dB) – Default value 55% (3.46dB) – High immunity to false alarms, slow response to smoke 85% (8.23dB) – Highest immunity to false alarms, slowest response to smoke. Configured via the integrated user interface
Delay to Alarm	: 10 seconds, for momentary partial obstruction of the beam path
Delay to Fault	: 10 seconds, for momentary obstruction of the beam path

## Design Parameters

Separation distance between Detector and Reflector	: 5 to 50m 50 to 120m with Reflective Long Range Kit
Beam path clearance	: 1m in diameter from centre line between Detector and Reflector
Detector dimensions	: 130W x 181H x 134D in mm (see diagram)
Reflector dimensions	: Up to 50m separation distance – Single reflector 100mm x 100mm x 9mm Up to 120m separation distance – Four reflectors arranged in a square patten 200mm x 200mm x9mm
Product weight	: Detector – 0.7kg; Reflector – 0.1kg
Multi-detector arrangement	: Dynamic Beam Phasing allows for Detectors to face each other with the reflectors in the middle
Housing colour	: White RAL9016, UV stable

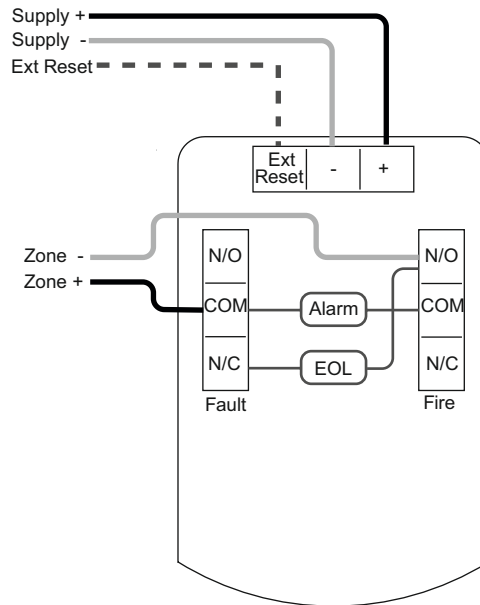


## Field Wiring

- Cable gauge and type : 2 core, dedicated, 0.5 to 1.6mm (24 to 14 AWG)  
 System compatible with fireproof and non-fireproof cable meeting local installation standards
- Cable entry : 3 knock-out locations capable of accepting M20, ½" or ¾" glands  
 : 4 drill-out locations capable of accepting glands up to 21mm diameter

## Test And Maintenance

- Alarm test : Optical alarm test using Commissioning and Maintenance Kit accessory



## Ordering information

Model No	Part No	Description
EazyBeam	R60-024-1547	Beam Detector - 50Mtrs
EazyBeam	R60-024-1560	Beam Detector - 120Mtrs

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