

# FG-BD100 BEAM DETECTOR



## PRODUCT OVERVIEW

Reflective Beam Detector has built in Laser beam pointing and Digital guide display for real user friendly alignment method. The Laser beam pointing accurately point the exact location where to mount mirror and with additional digital guide display allows to monitor and guide on the actual light intensity between the mirror and detector which cannot be seen by our naked eye making it more easy and convenient in alignment commissioning.

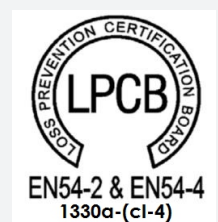
FG-BD100 has four adjustable operational ranges between 8 to 20, 20 to 40, 40 to 70 and 70 to 100 metres beside with three adjustable sensitivity setting ranges from 2.6dB, 3.8dB and 5.8dB to meet the specific environmental requirement. FG-BD100 works on the principle of reflective infrared beam obscuration. Used in conjunction with a reflector, it will notify the fire alarm panel when the infrared beam is obscured by smoke.



## Features

- > EN54-12 Compliance.
- > Hassle free alignment, built with digital guide display and laser beam pointing.
- > Employ single-ended design through reflective mirror.
- > Four ranges wide monitoring from 8-100 meters via encoder.
- > Built-in microprocessor.
- > Self-diagnosis function can monitor for internal faults.
- > Automatic compensation for factors weakening received signals, such as dust contamination, positional movement and ageing of the transmitter.
- > Fire and Fault interfacing relays.
- > Attractive and pleasing appearance.
- > Real User friendly alignment method.

MODEL	DESCRIPTION
FG-BD100	REFLECTIVE BEAM DETECTOR



# Technical Specification

## • Standard

Listed : LPCB Approval.  
Compliance : EN54-12  
Fire Detection and Alarm Systems: BS 5839 Part 1 : 2002

## • Specification

Operating Voltage : 20 - 28 V DC  
Current Parameters  
Standby : 23 mA  
Commission : 56 mA  
Alarm : 33 mA

## • Beam Sensor Sensitivity [ Via Encoder ]

Level 1 : 2.6 dB High Sensitivity  
Level 2 : 3.8 dB Medium Sensitivity  
Level 3 : 5.8 dB Low Sensitivity

## • Beam Pathway Length [ Via Encoder ]

Span 1 : 8 to 20 meters Limited Path  
Span 2 : 20 to 40 meters Short Path  
Span 3 : 40 to 70 meters Normal Path  
Span 4 : 70 to 100 meters Long Path

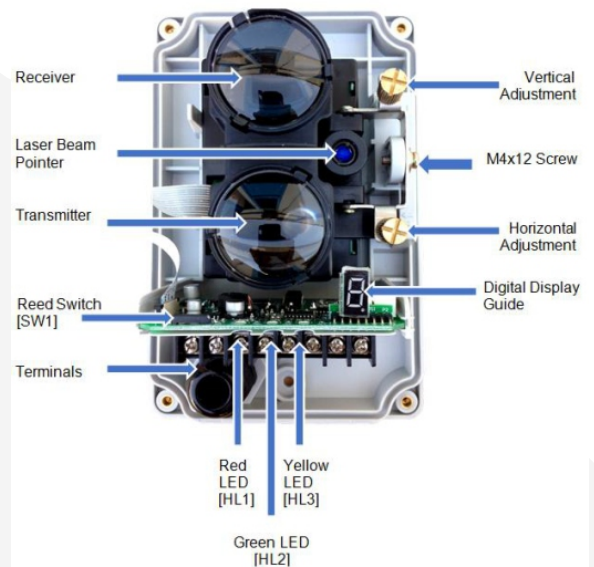
• **Beam Pathway Angle** : ±0.4° Directional.  
• **Alignment Guide** : Laser Beam Pointer  
• **Digital Display Guide** : Nixie Tube.

• **LED Indicator Guide**  
Red : Fire  
Yellow : Fault  
Green : Alignment

• **Reset Time** : Less than 2 second  
• **Relay Capacity [Fire & Fault]** : Normally Open & close/ 2.0 A; 30 VDC

• **Physical**  
Material / Colour : ABS / White  
Dimension(mm) / Weigh : L: 190.87 x W: 126.87 x H: 91.96 / 440g  
Weight : 0.130 kg with base

• **Environmental**  
Operating Temperature : -10°C to +50°C  
Ingress protection Rating : IP30[IP66 glue seal-for permanent fixing]  
Humidity : 0 - 95%



## FIREGUARD GLOBAL LTD.

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