

**Product Code:** BD1

**Description:** 50M Beam Detector, Expandable up to 120M with Reflective Long Range Kit



### General Information

<b>Dimensions (mm)</b>	181 x 130 x 134
<b>Available Operations</b>	Laser Assisted, Auto-alignment, Manual Alignment
<b>Alarm Response Threshold Levels</b>	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 All Configured VIA the Integrated User Interface
<b>Alignment Status Indication</b>	2 Green LEDs and 1 Yellow LED
<b>System Status Indication</b>	Normal Operation - Green LED Flashing Every 10 Seconds Alarm Condition - Red LED Flashing Every 5 Seconds Fault Condition - Yellow LED Flashing Every 10 Seconds for Obscuration of Every 5 Seconds for Contamination
<b>Optical Wavelength - Smoke Detection</b>	850
<b>Optical Wavelength - Laser Alignment (nm)</b>	650 (Class 3R <5mW)
<b>Fault level / Rapid obscuration (<math>\Delta \leq 2</math> Seconds)</b>	$\geq 85\%$
<b>Maximum Angular Alignment of Reflective Detector (°)</b>	$\pm 4.5$
<b>Maximum Angular Misalignment of Reflective Detector (°)</b>	$\pm 0.5$
<b>Maximum Angular Misalignment of Reflector (°)</b>	$\pm 5$
<b>Beam Detection Range (m)</b>	0 to 50, 0 to 120 (With BD1LRK)
<b>Beam Path Clearance (m)</b>	1 in diameter from Detector and Reflector
<b>Weight (Kg)</b>	0.7
<b>Warranty (Years)</b>	3

### Supply & Power

<b>Operating Voltage (V DC)</b>	14 - 36
<b>Cable Size (mm²)</b>	0.5 to 1.5
<b>Power Consumption (mA)</b>	<33

### Environment

<b>Ingress Protection</b>	IP55
<b>Operating Temperature (°C)</b>	20 to 55
<b>Storage Temperature (°C)</b>	-40 to +85
<b>Relative Humidity Resistance (%)</b>	<93

**Supplied** Beam Detector

### Accessories

### Features

Long Range Kit of 4 Reflectors to Increase BD1 Range From 50m to 120m.

Single Piece Reflector Supplied with BD1