

Technical Specification: BLUE

A full technical specification of the Fire Beam BLUE and its associated components can be seen below, answering most of the questions you may have. The Fire Beam BLUE is a conventional beam detector.



Electrical Specifications:

Supply Voltage	12 to 30 Vdc normal
Supply Current	5.5mA in all operational states

Supply Current	13.5mA in fast commissioning
Environmental Specifications:	
Temperature	-10°C to +55°C
Humidity	10 to 95% RH Non-condensing
Protection Index	IP65 when suitably mounted and terminated
Mechanical Specifications:	
Beam Head	H:180mm x W:155mm x D:137mm - Weight 1.1kg
70KIT140 Mid-Range Reflector	H:293mm x W:293mm x D:5mm - Weight 0.8kg
140KIT160 Long-Range Reflector	H:394mm x W:394mm x D:5mm - Weight 1.8kg
Unistrut Adapter	H:270mm x W:250mm x D:5mm - Weight 0.6Kg (mounts the Beam Head onto Unistrut)
Optical Specifications:	
Optical Wavelength	870nm
Maximum Angular Alignment	±5°

Maximum Angular Misalignment	(static not auto-aligning) Beam Head $\pm 0.4^\circ$ / Reflector $\pm 2^\circ$
Operational Specifications:	
Protection Range	
Fire Beam BLUE	Standard Product 7 to 70 metres. Use short range mask for distances between 7 & 20 metres
70KIT140	Mid-Range Reflector Kit 70 to 140 metres
140KIT160	Long Range Reflector Kit 140 to 160 metres
Alarm Sensitivity Levels	
25% (1.25dB) to 50% (3dB) in 1% (0.05dB) increments (default 35% (1.87dB))	
Alarm Condition:	
Obscuration drops to below pre-defined sensitivity level.	
Time to Alarm Condition adjustable between 2 to 30 seconds in 1 second increments (default 10 seconds)	
Alarm Indication:	

App Status - FIRE

Head Red Flashing LED

Alarm Relay Change Over (CO) Contact

Rating 2A @ 30 VDC

Test / Reset Features:

Beam test function with App

Alarm latching / auto-reset selectable (default auto-reset)

Alarm reset in latching mode with App reset function, removing power for >5 seconds or momentarily apply >5 VDC to reset connections in Beam Head

Fault Sensitivity Level:

<4%

Fault Condition:

Obscuration drops to below the fault sensitivity level within 1 second

Power Down or Supply Voltage < 9 VDC

Commissioning modes, Pre-Alignment and Auto-Alignment

Beam turned off during Beam Maintenance

Time to Fault Condition adjustable, 2 to 60 seconds in 1 second increments (default 10 seconds)

Fault Indication:

App Status - FAULT

Head Yellow Flashing LED 1 Second

Fault Relay Change Over (CO) Contact Rating 2A @ 30 VDC

Normal Condition:

Obscuration level is above the Alarm sensitivity level

App Status - NORMAL

Programmable on/off

Head Green Flashing LED

Programmable on/off

Auto-Align / Beam Contamination Compensation:

Auto-align during normal operation if obscuration drops below 90% for the duration of the align time set (doesn't affect normal operating mode)

Beam Contamination Compensation 4 hour monitoring. Compensation data available in the App