

technical specifications

Electrical Specifications:

Supply Voltage. 12 to 30 Vdc normal

Supply Current. 3.5mA (constant current) in all operational states

Constant Current. 17mA (constant current) 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.

180mmH x 155mmW x 137mmD
Weight 1.1Kg

Controller.

185mmH x 120mmW x 62mmD
Weight 0.55g

70KIT140 Mid-Range Reflector.

293mmH x 293mmW x 5mmD
Weight 0.8Kg

140KIT160 Long Range Reflector.

394mmH x 394mmW x 5mmD
Weight 1.8Kg

Adapter.

270mmH x 250mmW x 5mmD
Weight 0.6g
(mounts the Beam Head onto unistrut)

Optical Specifications:

Optical Wavelength. 870nm

Maximum Angular Alignment. $\pm 5^\circ$

Maximum Angular Misalignment.
(static not auto-aligning)
Beam Head $\pm 0.4^\circ$ Reflector $\pm 2^\circ$

Operational Specifications:

Protection Range:

FIREBEAM.

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
2 to 30 seconds in 1 second increments (default 10 seconds)

Alarm Indication:

Controller Status – FIRE

Controller Red Flashing LED

Head Red Flashing LED

Alarm Relay Change Over (CO) Contact
Rating 2A @ 30 Vdc

Test/Reset Features:

Beam test function by controller

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

Alarm reset in latching mode by controller 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:

Controller Status – FAULT

Controller Yellow Flashing LED 1 Second

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

Controller Status – NORMAL

Controller Green Flashing LED

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 effect normal operating mode)

Beam Contamination Compensation 4 hour monitoring. Compensation data available at the controller