

SFP-CBM-100M

Conventional Beam Detector



The SelectFire Plus Conventional Infrared Beam Smoke model SFP-CBM-100M is a reflective linear infrared beam smoke detector. The beam detector determines whether to output an alarm signal based on the attenuation of smoke along the optical path. This detector is suitable for large spaces such as historic buildings, factories, warehouses, airports, and stations. The beam detector emits an infrared beam, which is reflected back to the beam detector receiver by the reflector.

Smoke particles enter the beam detector or the reflector's optical path resulting in a reduced amount of "return light". When the return light is reduced to a specific set threshold, the beam detector will output an alarm signal.

Features

- Simple non polarity conscious two core power supply, supports 24VDC. The bus comprises 6 terminals located at the back of the beam detector, the two on the left are for the power supply, the two in the middle are for fire alarm output and the two on the right are for fault output to the conventional panel.
- Simple Automatic Setup & Commissioning: Laser assisted positioning installation, built in stepper motor automatically calibrates detector angle. No manual adjustment required, the beam detector is auto-aligning.
- Relay interfaces: Normally Open fire and fault output relays.
- High immunity to false alarms: Neural network smoke recognition algorithm, immunity to interference from natural light such as sunlight. Incorporates an algorithm that reduces false alarm caused by sunlight. However, it is not recommended to install the beam detector or the reflectors facing the sunlight.
- Very low power consumption: Very low Quiescent current and alarm currents.
- Multi-level drift compensation algorithm for dust accumulation.

Technical Specification

Type	Beam Detector
Supply Voltage	16-28V DC
Operating Temperature Range	-10°C to 55°C (14° to 131°F)
Operating Humidity	≤95% RH Non-condensing
Ingress Protection Rating	IP65
Setup & Commissioning	Automatic
Optical path length	10m to 100m
Maximum Angular Misalignment	± 0.5° in optical path direction. Detection may fail if this Angular Misalignment is exceeded
Alarm Sensitivity	Fixed to Level 1
Dimensions (mm)	117W x 152H x 85.5D
Weight (Kg)	0.49
Shell color code	PANTONE 7527 U
Laser Module	Compliant with IEC 60825-1:2014
Enclosure & PCB	Compliant with UL 796 & UL 94
EMC Certification	Tested & Approved by SGS to EN IEC 61000-6-3: 2021, EN 50130-4: 2011 + A1:2014
Safety Certification	Tested & Approved by SGS to Safety Standards EN IEC 62368-1:2020+ A11:2020 & IEC62368-1:2018
CE Certification	Tested & Approved by SGS to EN50130-4:2011+ A1:2014 & EN IEC 61000-6-3:2021

Dimensions

