EMC TESTED NO.:BSTDG

Operation Instruction

M-235 Combined Radar Activation and Infrared Safety Sensor

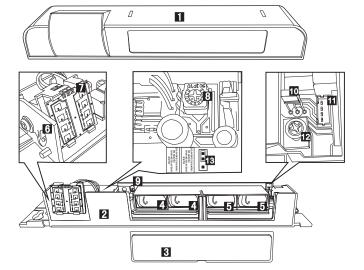


1 Safety Instruction



Thank your for your purchasing, please refer to the following details

Product Overview



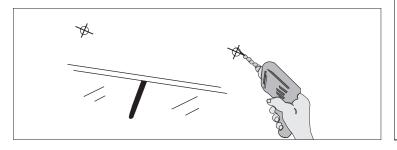
- 1 Top Cover
- 6 Radar Tilt Angle Indication
- 3 IR Prism 8 Radar Sensitivity Screw 9 Activation Indicator
- 4 Transmitter
- 5 Receiver 10 Safety Indicator

11 Main Connector 2 Bottom Cover 7 Radar Module 12 IR Adjustment Screw 13 NO/NC selector

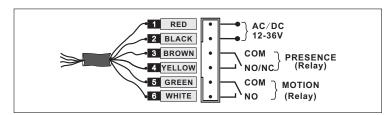
3 Characteristics

- Combined radar activation and Infrared safety sensor is used for automatic sliding door, folding door and Curve door. Radar technology is for door activation. Infrared technology is for door safety entrance.
- Have function of background self-learn. Can learn background automatically when power on. Suit all kinds of occasions. Always self-correcting once be influenced by quake, distortion, move, dark and sunshine. Ensure the sensor can work durable.
- Microwave technology adopts the Germany Microwave sensor module, ignore the influence by temperature and humidity with reliable working performance.

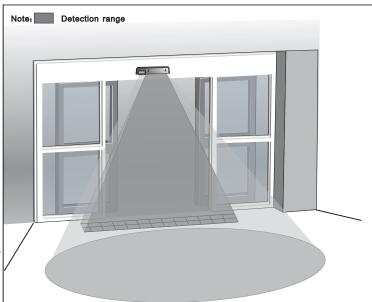
4 Installation



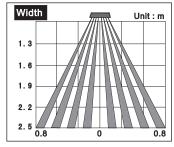
Wiring Diagram

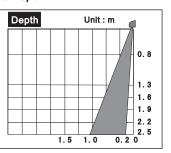


6 Activation and Safety Detection Range

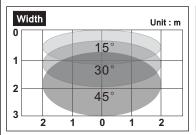


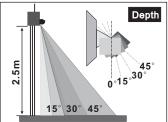
Infrared Safety Sensing Field: Width & Depth



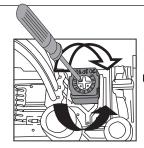


Radar Activation Sensing Field: Width & Depth:





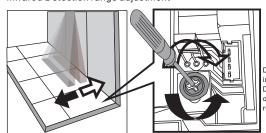
Adjustment for Microwave sensitivity and Infrared Detection Range.



Microwave Sensitivity Adjustment

NOTE: High Sensitivity by clockwise rotation, Low Sensitivity by contrarotating.

Infrared Detection range adjustment



Detection range towards inside by clockwise rotation. Detection range towards outside by counterclockwise rotation

8 Note

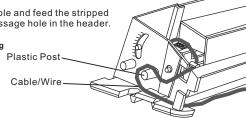


Please install the sensor should be \leq 100mm from header to avoid the weakness of sensitivity

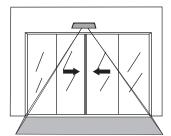
Cable Routing

Locate the enclosed cable and feed the stripped end through the wire passage hole in the header.

Note:Observe proper routing of the cables as shown. This is to divert rainwater if water should run down the cable.Proper routing of the wire also provides easier installation of the cover.



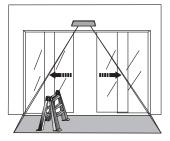
Note : Infrared Safety Detection Range



Please ensure the detection area should be clear duringthe sensor self-learning process.



Note : Infrared Safety Detection Range



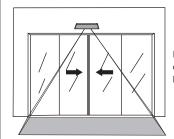
The door will open when a object put within the detection area.(as picture showed)





After 18s with no other objects or people enter in, the sensor will regard that object as a part of background and will not open the door.





Remove Objects, system will output 2S door open signal and return to original background.

9 Parameter

Power Input:	AC/DC 12 to 30V(-/+10%)
Cable Length:	2.5m
Protection:	lp54
Signal Output	Relay
Max Installation Height:	2500mm
Static Current:	65mA
Action Current:	130mA
Dimension:	260.3 (L) ×53.4 (W) ×44 (H) mm
Cover:	ABS

Infrared Safety:

a.ca ca.c.y.	
RAY TYPE	Reflect infrared
Ray Source: :	Infrared940mm
QUANTITY OF RAY	8 emit rays and 8 receive rays
Self-learning time:	10s
Operation Indicate:	Standy by Blue LED, Action by Red LED
Temperature:	-40°Cto 60°C
Detection Range:	1600 (W) \times 800 (D) mm
Output time:	500ms
Respond:	≤100ms
Ontical surface	PMMA

Microwave Activation:

Microwave Activation:	
Technology:	Microwave processor
Frequency:	24.125GHz
Emission Power:	<20dBm EIRP
Transmission frequency density	<5mW/cm2
Detection Mode:	Movement
Detection Range:	$4m(W) \times 2m(D)$
Output time :	0.58
Temperature :	-20°Cto +55°C