HAISEN

SHENZHEN HAISEN TECHNOLOGY CO.,LTD

PRODUCT SPECIFICATION

PRODUCT MICROWAVE MOTION SENSOR

MODEL HB001VCR-1A

SCOPE OF APPLICATION This specification is applicable to describe the function and use of HB001VCR inductor of Shenzhen Haisen Technology Co.,Ltd

DATE 2021.1.13

APPROVED	CHECKED	APPROVAL

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HAISEN

MICROWAVE MOTION SENSOR

Model ： HB001VCR

Features ：

1. Automatic On/off control with Daylight sensor.
2. DC input
3. 5 year warranty

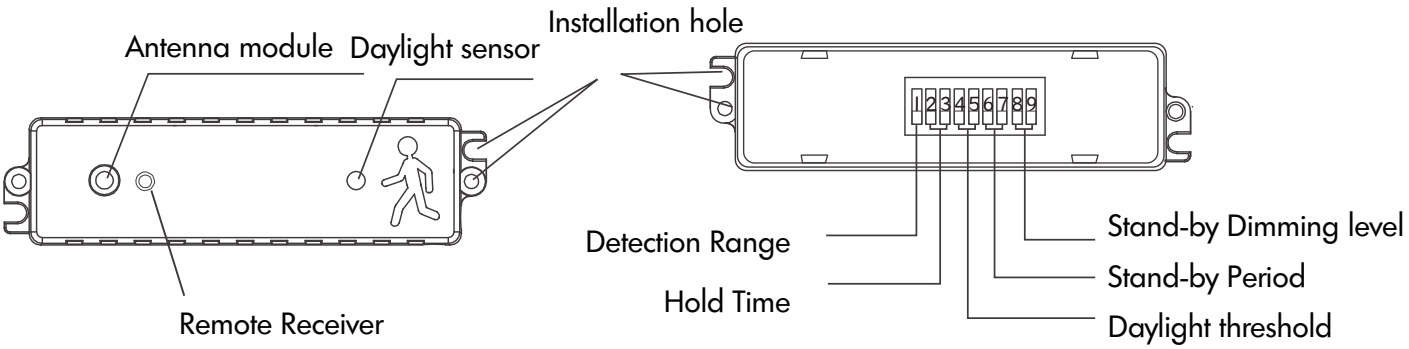
CE RoHS COMPLIANT

On/off control | Detection area | Hold time | Daylight threshold | Stand-by period | Stand-by dimming level

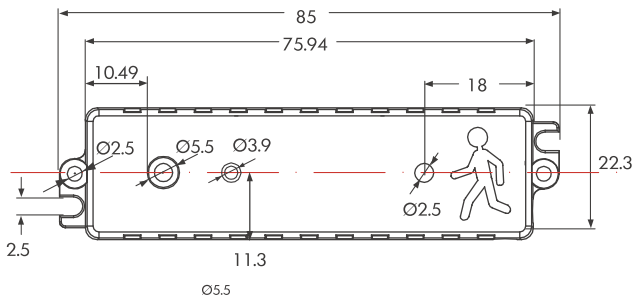
Technical data

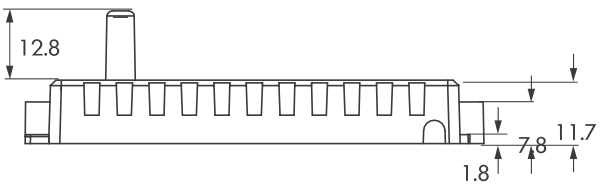
Input	Operating voltage	DC:10.5-15V	
	Operating current	＜30ma	
	Stand-by power	＜0.5W	
Output	Control method	On/off	
		0-10V diming	
Sensor Parameters	Microwave frequency	5.8GHz±75MHz	
	Microwave power	‹0.3mW	
	Detection area	DIP Switch : 50%/100%	Remote control : 25%/50%/75%/100%
	Hold time	DIP Switch :5s/30s/1min10min	Remote control : 5s/30s/1min/3min/5min10min/20min/30min
	Daylight threshold	DIP Switch :10Lux/30Lux/50Lux/Disable	Remote control : 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable
	Stand-by period	DIP Switch :0S/ 30S/ 20min/+∞	Remote control : 0s/10s/30s/1min/ 5min/10min/ 30min/ 60min/+∞
	Stand-by dimming level	DIP Switch : 10% 20% 30% 50% 100%	Remote control : 10% 20% 30% 50% 100%
	Mounting height	Max. 4m (ceiling mounted)	
	Detection range	diameter 10m*4m(Max)	
	Motion detection	0.5~+1m/s	
	Detection angle	150°(Wall mounted) 360°(ceiling mounted)	
Others	Operating temperature	-20°C~+60°C	
	IP rating	IP20	
	Warranty	5 years	
	Function setting	DIP Switch	
	Connection	Red 12V+ Black DIM- Yellow DIM+	
Note	1. The result is based on 1.65M/60kg medium-size man walking towards with speed 0.8m/s in vacant room; The sensor hanging at 3M height. 2. It may have different performance if the test delivered by different people, with different speed, at different height or in different conditions.		

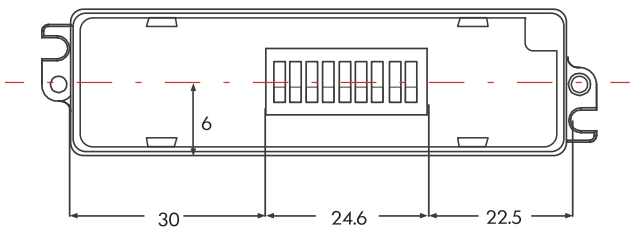
Mechanical(Unit: mm)



Size(Unit: mm)







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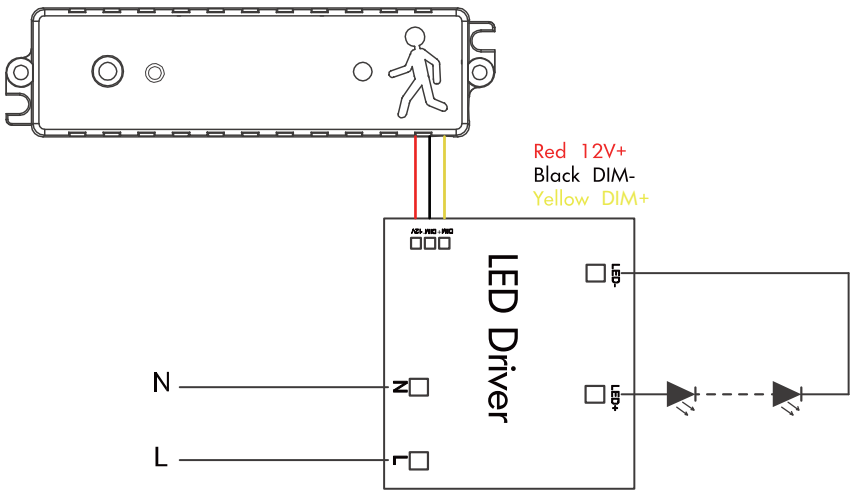
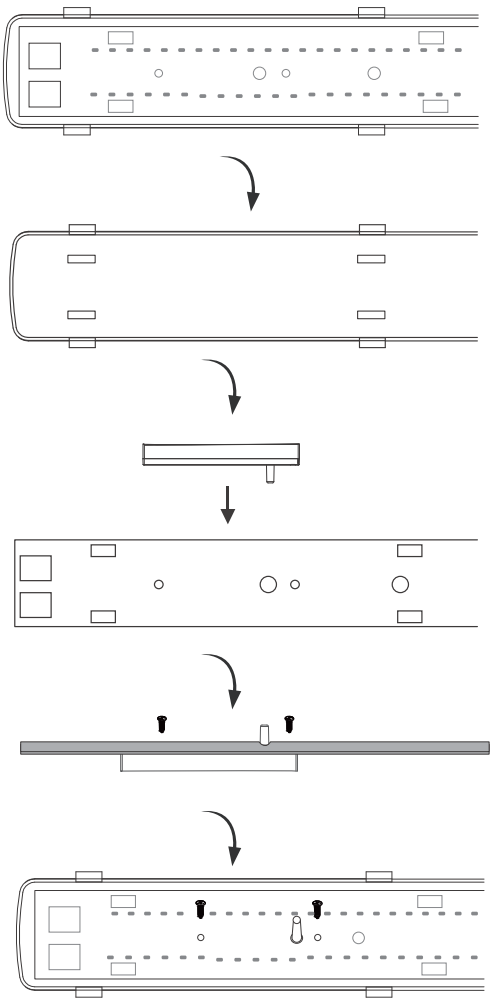
Wiring diagram



Installation Method



Applications

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Settings

Switch UP

Switch DOWN

●	100%
○	50%

●	●	5s
●	○	30S
○	●	1min
○	○	10min

●	●	Disable
●	○	50lux
○	●	30lux
○	○	10lux

●	●	0S
●	○	30S
○	●	20min
○	○	+∞

●	●	10%
●	○	20%
○	●	30%
○	○	50%

Detection area
In this area, movement will be detected and able to trigger the sensor. 100% detection area is also known as the strong sensitvity.

Hold-time
The period of light keeping 100% brightness after moving objects leave the detection area.

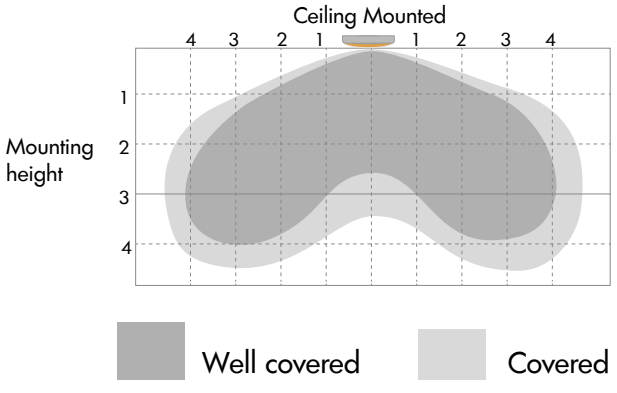
Daylight threshold
Definition of the ambient brightness; only when the ambient brightness is lower than the preset specific lux amount, the sensor will work; when it's preset as "disable", the sensor works everytime it detects motion regardless the ambient brightness.

Stand-by period
The period of light keeping low output before it's completely switched off. When it's preset as"∞", the light always keep at low output if no movement in the detection area and doesn't turn off.

Stand-by dimming level
The definition of low output in the standby period.

Detection coverage

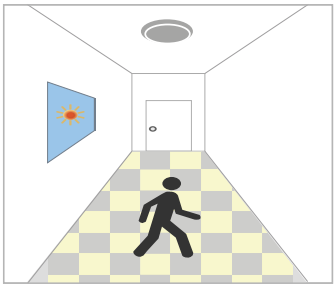
This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.



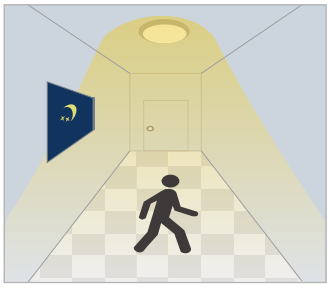
Application

1. Automatically ON/OFF function:

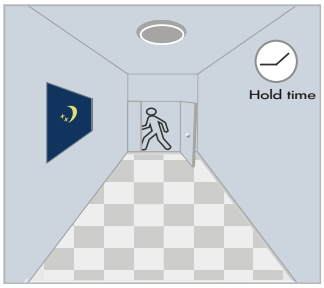
Light on when detect movement and off after people leave at night. Applications: Corridor, Staircase.



With sufficient daylight, even when motion detected, light remains OFF.



With insufficient daylight, when motion detected, light ON.



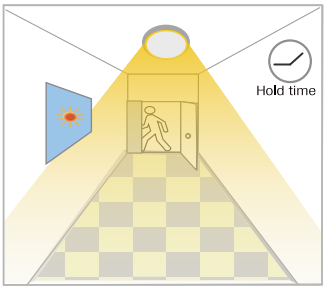
After the last detection and the present hold time elapsed, light OFF.

2. No daylight function

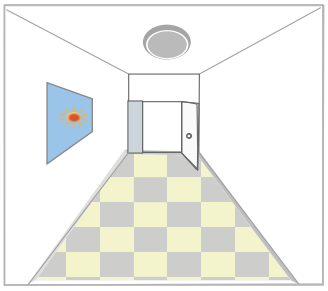
The daylight threshold is set to "Disable".

Light on when detect movement, After people leave, Light off after stand-by period. Applications: Dim places such as Basement Parking, Underpass.

When motion is detected, the sensor will switch on the light to 100% brighteness.

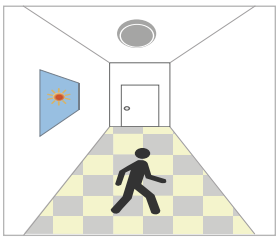


After people leave the detection area, light remains 100% brightness within hold time.



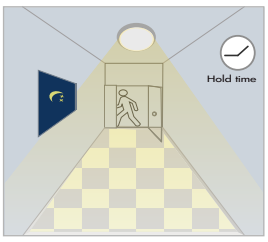
After the last detection and the present hold time elapsed, light OFF.

3. Function Demo - Dimmable control/Corridor function

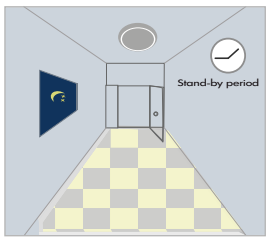


With sufficient daylight, even when motion detected, light remains OFF.

With insufficient daylight, when motion detected, light ON.



After last detection, the light will be dimmed down to the stand-by dimming level (10%,20%,30% or 50%) after holdtime.



After the stand-by period, light OFF.

Attention

1. Please read the instructions carefully before using this product and keep it well for all users to read at any time.
2. The sensor should be installed by qualified electrician and ensure power is off before the installation.
3. We reserve the right to modify any incorrect text, image and necessary technical parameters.
4. Any unauthorized modification is forbidden, otherwise all guarantees will be immediately invalid.

Application Environment

DRIPPING WARNING: This product shall not be exposed to dripping or splashing, and no objects lled with liquids, such as vases, shall be placed on the product.
VENTILATION WARNING: The normal ventilation of the product shall not be impeded for intended use.
SAFETY VERIFICATION: This device is made and tested to meet safety standards of the FCC, requirements and compliance with safety performance of the U.S. Department of Health and Human Services and also with FDA Radiation Performance Standards 21 CFR Subchapter.
WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modications to this equipment may cause harmful interference unless the modications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modication is made.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

" FCC Radiation Exposure Statement:
-The device has been evaluated to meet general RF exposure requirement.
-The device can ben used in the portable exposure condition with restiction"

- English:
This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.
- French:
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition without restriction.

le dispositif a été évalué à satisfaire l'exigence générale de l'exposition aux rf.
l'appareil peut être utilisé dans des conditions d'exposition portatif sans restriction