



HSE-SCM19H-2
HSE-BSCM19H-2



HSE-SCM19H-3
HSE-BSCM19H-3



HSE-SCM19H-4
HSE-BSCM19H-4



Patent No.: US12382556B2

Description

This series of products are high-bay sensors. The maximum mounting height for microwave sensors support a maximum mounting height up to 15 m (49 ft).

IP65 rated, dustproof and resistant to low-pressure water spray for stable use in damp indoor and rainy outdoor areas.

Features

- 4-pin audio plug interface .
- Zhaga interface .
- 4-wire interface: Red: VCC / Black: GND / Yellow: DIM+ / White: CCT.
- Supports stepless dimming from 0-100% and color temperature adjustment ranging 2700K-6500K.
- UFO high bay, Linear high bay, area light



Specifications

Input Voltage	DC 12-24V
Input Current	<30mA
Stand-by Power	DC 12V @ < 0.5W
Control Method	ON/OFF, DIM 0-10V, DIM CCT Adjustment
Microwave Frequency	5.83-5.87 GHz
Microwave Power	<0.3mW
Detection Angle	Without Glass Cover (Ceiling Mounted 360° Wall Mounted 30-150°)
Mounting Height	15m / 49ft Max.
Detection Range	Radius: 4-8m (13 - 26.24ft)
Working Temp	-35°C~+70°C
IP Rating	IP65

Regular-version Parameter



Control Device	Remote Control HD06R (purchased separately)
Warm-up Period	10s
Detection Area	25% / 50% / 75% / 100%
Hold Time	5s / 30s / 1min / 3min / 5min / 10min / 20min / 30min
Daylight Threshold	2Lux / 10Lux / 30Lux / 50Lux / 80Lux / 120Lux / 200Lux / 250Lux / 300Lux / 350Lux / 400Lux / Disable
Standby Dimming Level	10% / 20% / 30% / 50%
Standby Period	0s / 10s / 30s / 1min / 5min / 10min / 30min / 60min / +∞
CCT Function	Adjust CCT from 2700K to 6500K via the CCT button on the remote.

Bluetooth-version Parameter

Control Device	HSE WISE APP
Bluetooth Transmit	30m / 98ft
Radio Frequency	2.4GHz (2402~2480MHz)
Bluetooth Version	5.4
Dim level	Min Dim Level: 0% - 100% (The minimum value can be set in the zone settings panel)
Detection Area	High / Medium / Low
Max Dim	1%-100% Continuously Adjustable
Hold Time	5s/30s/1 min-120 min (Min Hold Time 5s, Adjustment Range 1 min)
Stanby Dimming Level	1% - 100% (Adjustment Range 1%)
Standby Period	0s/5s/30s/1min to 120min (Adjustment Range 1 min) / ∞
Daylight Threshold	Disable 50Lux - 2000Lux (Adjustment Range 50Lux)
CCT Function	When paired with the HSE-C2 controller, Adjustment can be made via the HSE WISE APP.

Get It Activated

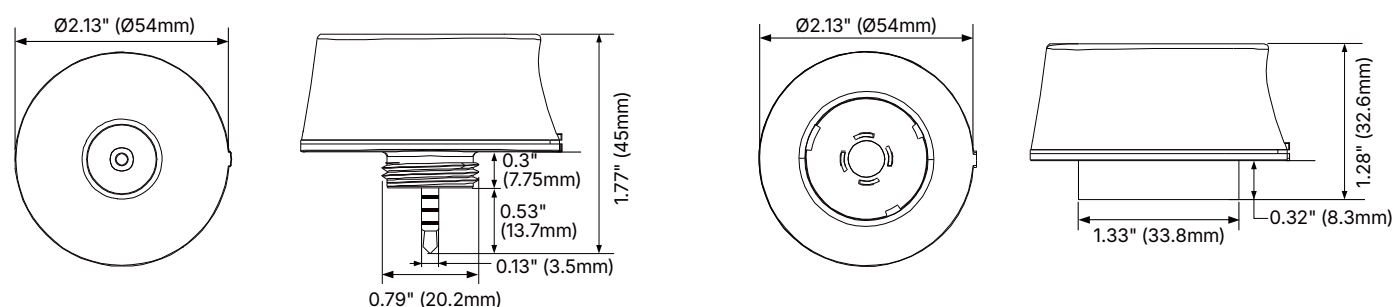
Daylight Harvesting	Function supported, please follow steps in "Performance" part to activate it.
Dusk/Dawn function (Photocell)	Function supported, please follow steps in "Performance" part to activate it.

Ordering Information

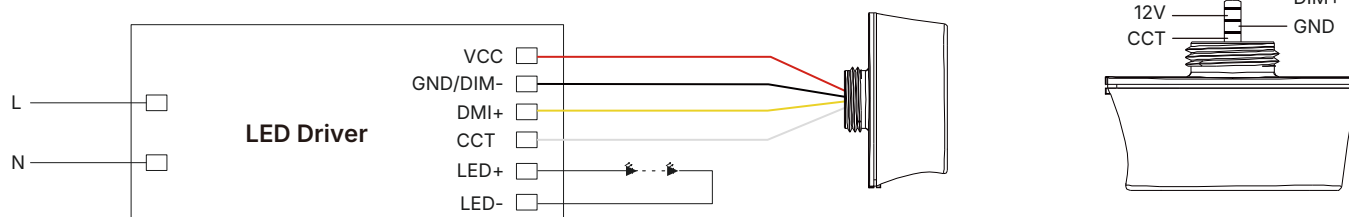
Example: HSE-BSCM19H-1

Brand	Bluetooth	Product type	Sensor type	Series of products	Installation type	Wiring method
HSE	Blank Regular B Bluetooth	S Sensor C CCT	M Microwave	19 Series Code	H Highbay	2 Audio Jack 3 Zhaga 4 Wire

Dimensions



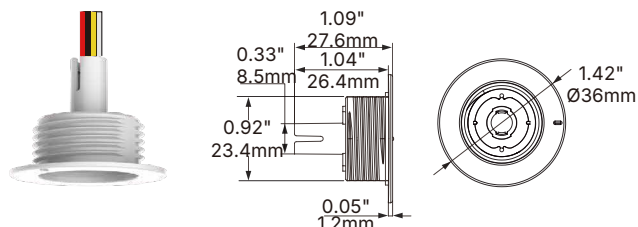
Wiring



Receptacle

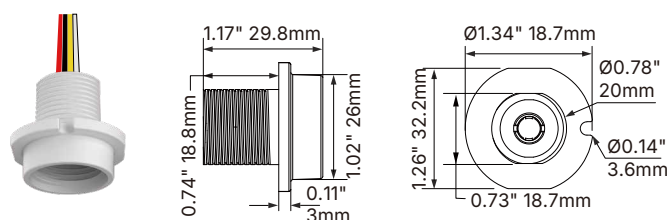
Audio Jack Terminal base (HSE-WK1)

Red: VCC / Black: GND / Yellow: DIM+ / White: CCT



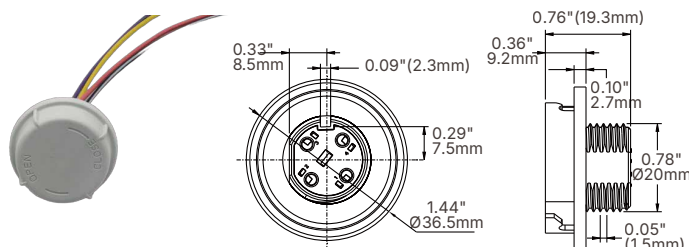
Audio Jack Terminal base (HSE-WK3)

Red: VCC / Black: GND / Yellow: DIM+ / White: CCT

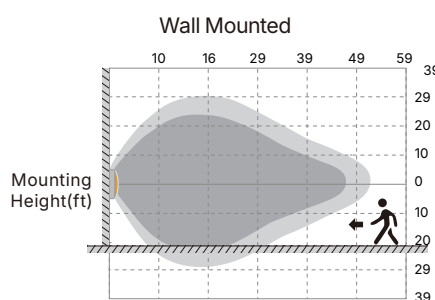
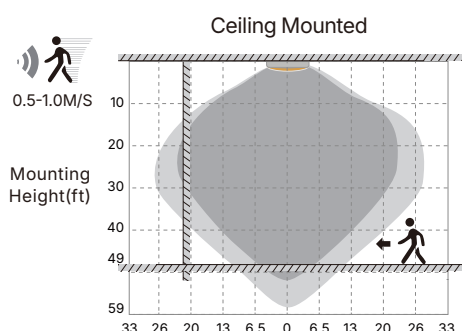


Zhaga Terminal base (HSE-WK5)

Black/White: VCC / Pink: GND / Purple: DIM+ / Yellow: CCT



Detection Coverage



Highest mounting height is 15m / 49.21 Max.

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

Well Detected Area
Possibly Detected Area

Performance

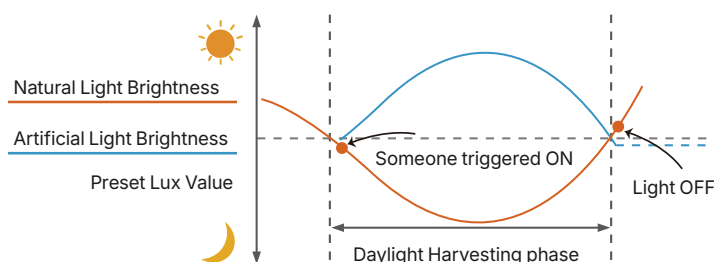
1. Daylight Harvesting

Standard Version Operating Steps

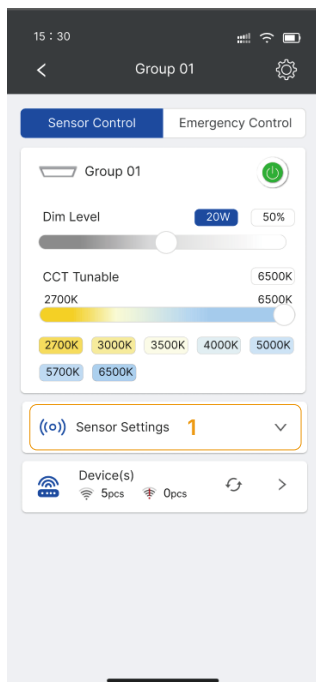
1. Stay in SENSOR MODE
2. STANDBY PERIOD as 0S
3. DAYLIGHT as any of 50LUX, 80LUX, 200LUX, 250LUX, 300LUX, 350LUX, 400LUX
4. Press DAYLIGHT HARVESTING button to ON



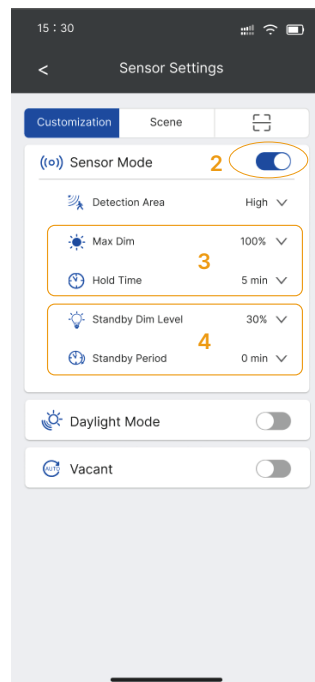
Remote Control



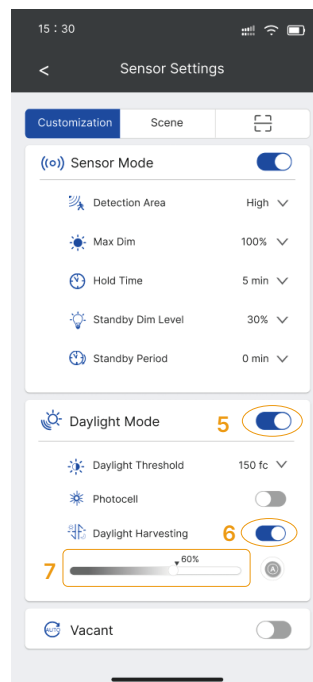
Bluetooth Version Operating Steps



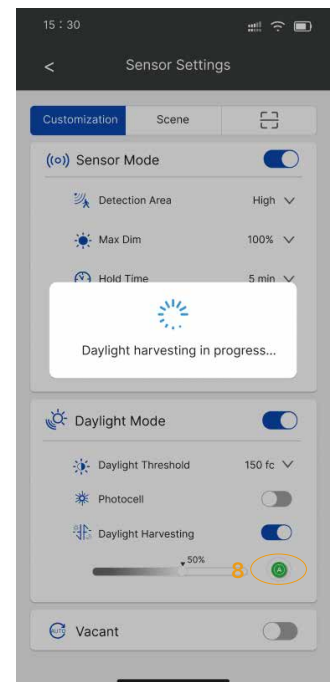
1. Tap "Sensor Settings" to open the control interface.



2. Enable the Sensor Mode.
3. Set the Max Dim and Hold Time parameters.
4. Set the Standby Dim Level and Standby Period.

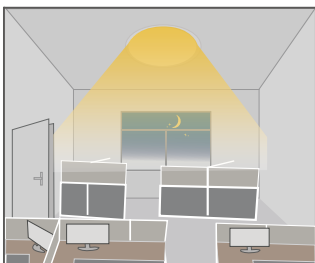


5. Enable the Daylight Mode.
6. Enable the Daylight Harvesting.
7. Adjust the luminaire output to the desired comfort level.

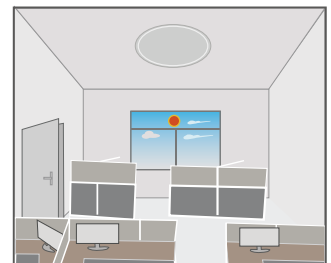
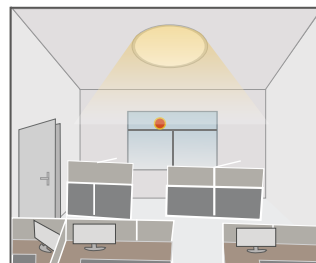
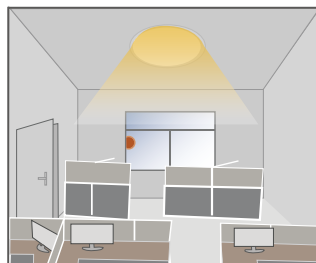


8. Press the Learn button to save the current ambient light level as the reference value.

Picture Diagram



When ambient brightness is lower than preset lux level, Someone triggered ON light and keep dimming according to the change of the ambient brightness; when outside is getting darker, the inside will be brighter, and brighter darker.



Light OFF when ambient brightness becomes higher than the preset lux level.

2. Dusk/Dawn function

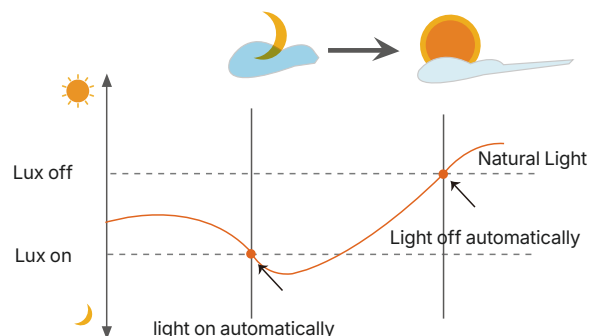
The sensor is able to differentiate artificial light brightness from natural light after installed inside the fixture, and automatically turn off light when ambient brightness exceeds preset lux level.

Standard Version Operating Steps

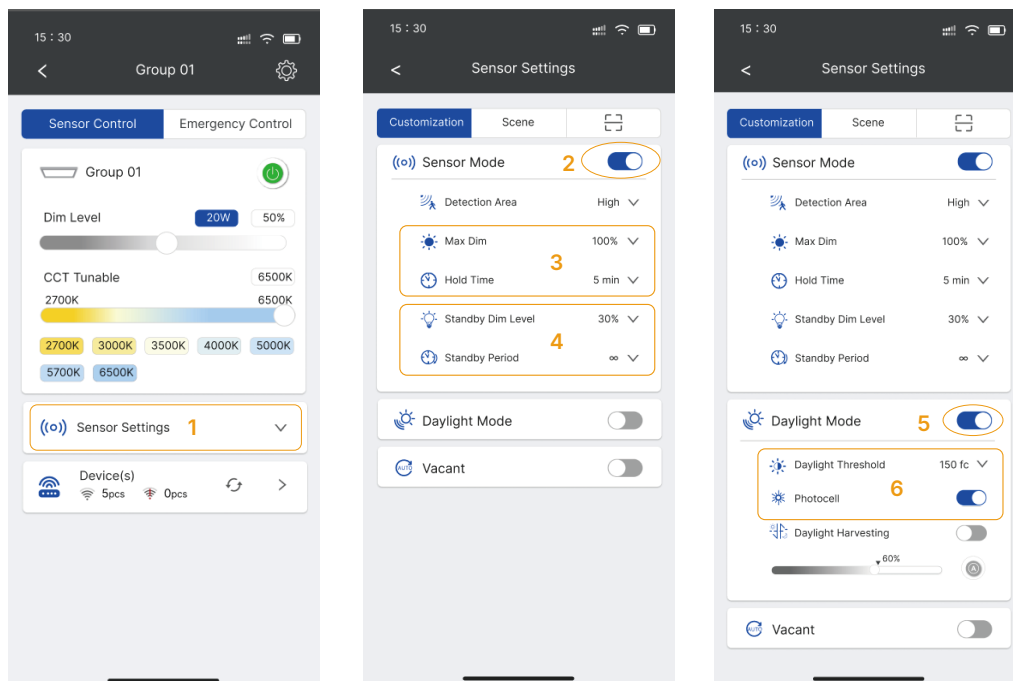
1. STANDBY DIM LEVEL as any of 10% 20% 30%
2. STANDBY PERIOD as infinite
3. RDAYLIGHT as any of 30LUX, 50LUX, 80LUX, 120LUX, 200LUX, 250LUX, 300LUX, 350LUX, 400LUX.



Remote Control



Bluetooth Version Operating Steps



1. Tap "Sensor Settings" to open the control interface.

2. Enable the Sensor Mode.

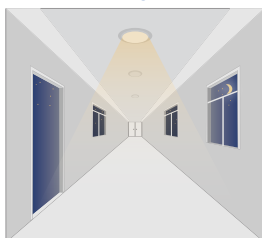
3. Set the Max Dim and Hold Time parameters.

4. Set the Standby Dim Level and Standby Period MUST be set as INFINITE.

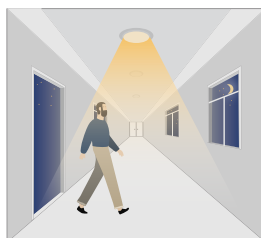
5. Enable Daylight Mode,

6. Set the Daylight Threshold, and then enable Photocell.

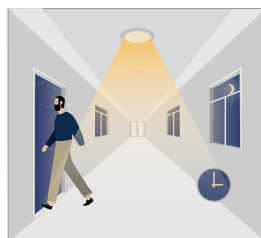
Picture Diagram



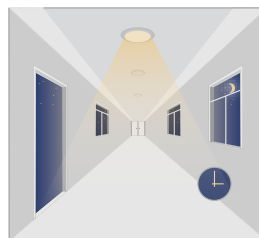
With insufficient ambient brightness, sensor turns on light and keeps it at standby dimming level even if there is no motion or presence.



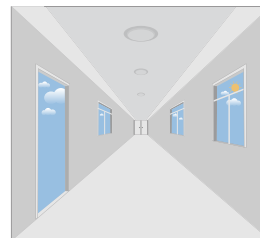
When sensor detects motion or presence it will bring the light level up to 100%.



After motion is no longer detected, fixture remains at 100% for hold time.

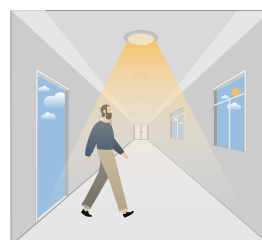


After pre-set hold time period it will dim light to standby dimming level again and always keep it.

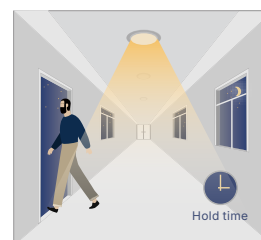


With sufficient ambient brightness, sensor will turn OFF light automatically.

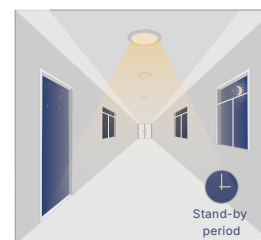
3. With Daylight Disable



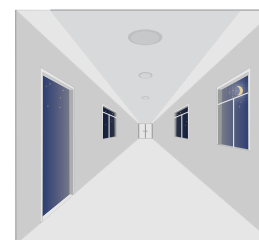
Sensor turns ON light when motion is detected.



Sensor keeps for a hold time period after motion leaves

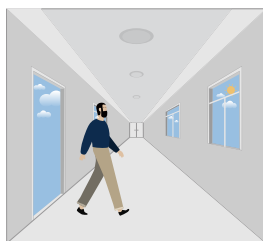


Sensor dims light to standby dimming level after hold time if there is still no motion

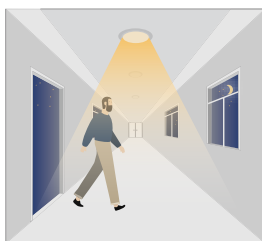


Sensor turns OFF light after standby period

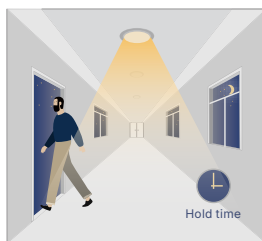
4. With Daylight Threshold



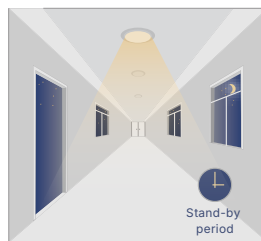
With sufficient daylight, the sensor keeps light OFF even motion gets detected



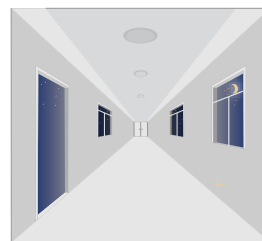
With insufficient daylight, the sensor turns light ON when motion gets detected



After there's no motion detected, the sensor keeps light ON 100% for holdtime.



After holdtime, sensor dims light to standby dimming level for standby period. if the standby period has been set as 0s, sensor turns light OFF automatically after holdtime.



The sensor turns OFF light automatically after the standby period when there's no motion detected.

Factory Setting

Regular-version
1. Detection Area: 100%
2. Hold Time: 5S
3. Daylight Threshold: Disable
4. Standby Period: 0S
5. Standby Dimming Level: 10%

Bluetooth-version	
1. Sensor Mode: ON	5. Standby Dimming Level: 20%
2. Detection Area: High	6. Standby Period: 10min
3. Max Dim: 100%	7. Daylight Mode: OFF
4. Hold Time: 10min	

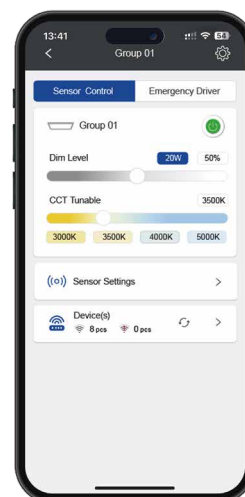
Compatible with EIA, EIB & EIH Series Emergency Power Supplies

- Supports seamless integration with EIA, EIB, and EIH series emergency power supplies.
- Normal Mode: Sensor operates normally for intelligent lighting control.
- Emergency Mode: Sensor automatically switches to emergency mode and disables sensing functions to ensure reliable backup operation.
- Requires 10±0.5V DIM+ / DIM- control voltage compatibility.

Invention Patent

Equipped with U.S. authorized invention patent Dimming and color temperature adjusting control module (Patent No.: US12382556B2), supporting 0-100% stepless dimming & precise multi-color temperature switching.

 US012382556B2	
(12) United States Patent Tan et al.	(10) Patent No.: US 12,382,556 B2 (45) Date of Patent: Aug. 5, 2025
(54) DIMMING AND COLOR TEMPERATURE ADJUSTING CONTROL MODULE	(52) U.S. CL. CPC H05B 45/10 (2020.01); H05B 45/20 (2020.01); H05B 45/325 (2020.01)
(71) Applicant: Dongguan Haiyue Intelligent Technology Co., Ltd. , Guangdong (CN)	(58) Field of Classification Search CPC H05B 45/10; H05B 45/20; H05B 45/325; H05B 47/19; H05B 47/165; H05B 47/195 See application file for complete search history.
(72) Inventors: Huishi Tan , Guangdong (CN); Xinmin	





Attention

1. The sensor should be installed by qualified electrician and ensure power is OFF before installation.
2. Please read the instruction carefully before using the product and keep it well for other users to read any time.
3. We reserve the right to modify any incorrect text, image and technical parameters.
4. Any unauthorized modification is forbidden. Otherwise all guarantees will be immediately invalid.
5. Product could be optimized without prior notice.

Application Notes

1. Suitable for indoor application, half/completely outdoor environment conditions might be captured as moving signals to trigger the sensor.
2. Suitable for ceiling mount installation, adjust sensitivity properly if it's installed on side-wall because it gets more sensitive.
3. Adjust sensitivity properly when the sensor is applied in small/narrow/metal-built/with metal spaces.
4. Microwave sensor can't be placed under/inside metal shell; Microwave module must directly face the detection area with edge lower than light fixture.
5. Keep the sensor away from vibration equipments, air-conditioning outlets, smoke extractors alike conditions to avoid unwanted trigger.
6. Keep the sensor module away from AC input and DC output to avoid high/low frequency signal interference.
7. At least 2m/6.5ft distance between microwave sensors; 1.5m/4.9ft between the sensor and other wireless devices such as routers to avoid possible radio interference.
8. Daylight testing delivered in bright day without shadow or specially designed lampshade or lens.
9. Dimming performance differs when connected to different drivers; If the driver can't completely turn OFF, sensor can't either.
10. Input power voltage must be stable with float less than 10%.
11. When the sensor is first powered on, the light activates at 100% brightness. Conventional units feature a 10s warm-up, while Bluetooth models require no warm-up. The light then automatically dims to standby level or powers off.
12. Distance detection is delivered by testing person about 165cm in open area as reference, the result differs by size and speed of moving objects, mounting height and real-life situation.

App Download

