

Specification

Product Name: DC Controller

Product Model: 257599

【Product Feature】

- 220-240V DC input, PWM dimming signal or ON/OFF selection
- Three-step and two-step dimming is optional, detection area is adjustable.
- Patented antithetical dipoles antenna design and Adaptive Algorithm, which effectively solves the problem of low installation height of columnar antenna sensors and false triggering caused by side-lobe radiation of the antenna when installed in a metal room.
- Widely used in parking lots and Logistics warehouse and other complex environment places
- Sensor parameters can be set by DIP switches, easy to configured.

【Parameter】

Input		
Rated Voltage	220-240Vdc	
Working Current	mA	
Ripple Voltage	<100mVp-p	
Output		
Output Signal	PWM dimming signal	ON/OFF
Daylight Sensor		
Daylight Sensor	10Lux/25Lux/50Lux/Disable	2Lux/10Lux//25Lux/50Lux/Disable
Stand-by DIM Level	10%/30%	
Sensor Parameters		
Working Frequency	5.8 GHz ±75MHz, ISM band	
Transmitting Power	1mW Max.	
Detection Area	100%/50%	100%/75%/50%/25%
Hold Time	5S/90S/5min/10min	5S/30S/1min/3min/5min/10min/20min/30min
Stand-by Period	0S/10S/15min/+∞	
Detection Area(Radius)	Ceiling mounting 3m: r≥4m@0.3m/s, r≥2.5m@1m/s; Wall mounting: r≥5m@0.3m/s, r≥3m@1m/s Test condition: Set 100% sensitivity, open 60 m² indoor area.	
Mounting Height	3m (6m Max)	
Environment		
Working Environment Temperature	-25~60℃	
Storage Temperature	-40~80℃ Humidity: ≤85% non-condensing	
Certificate Standards		
Certified	CE	
Environmental	RoHS 2.0, Reach	

Requirements

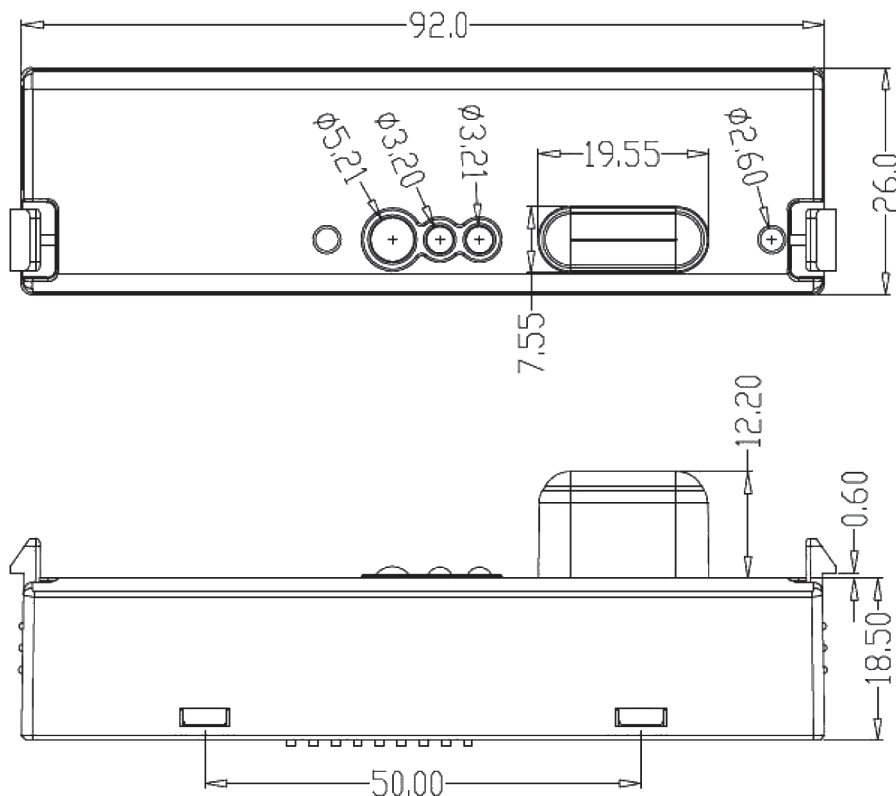
IP Rating	IP20
Other	
Wiring	4pin 2.54mm terminal
Installation	Built-in
Package	Clapboard + Carton(K=A)
Net Weight	28.5 ±3g
Lifetime	5 years warranty@Ta

【Function】

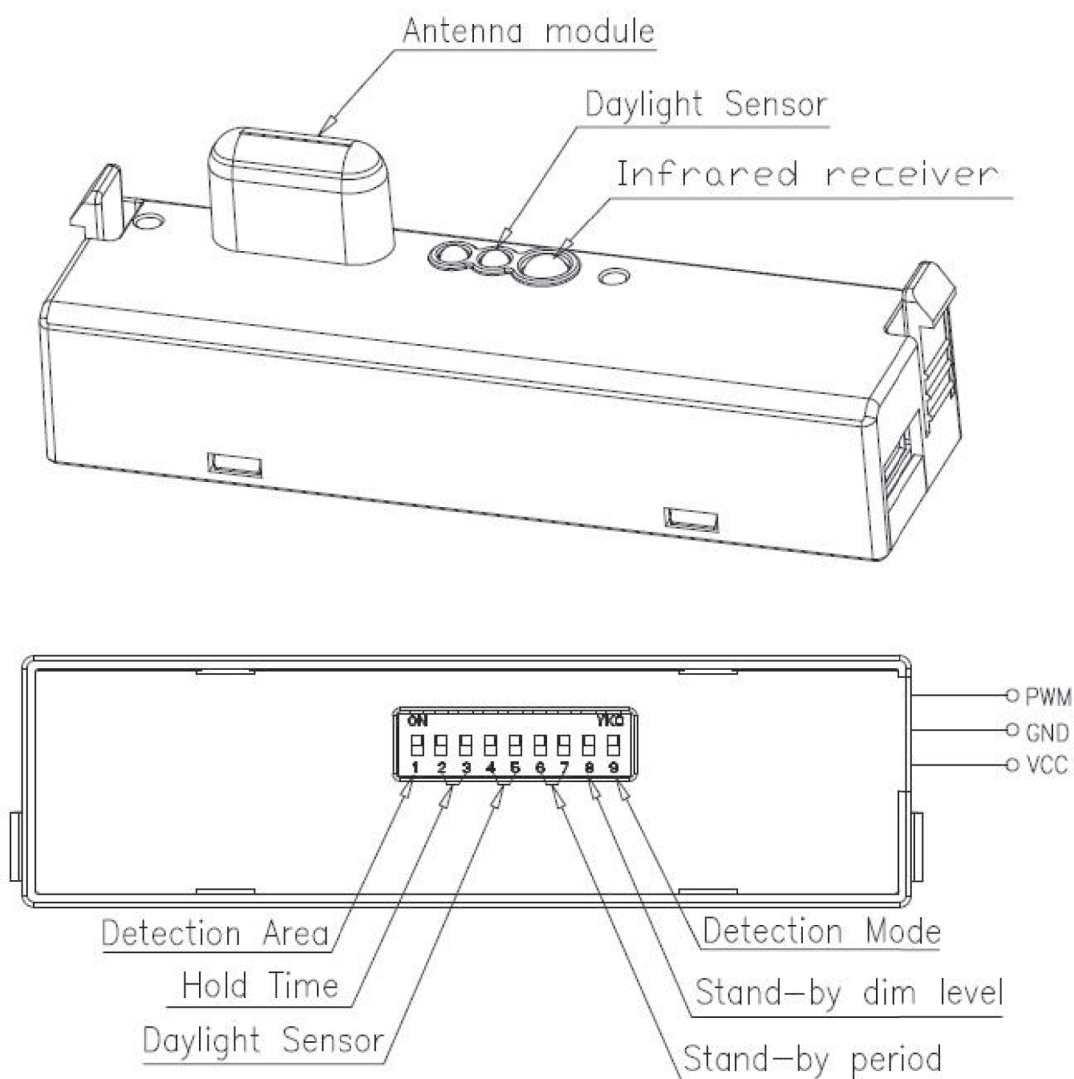
☒ ON/OFF function	Stand-by Period set to "0s"
☒ Two-step dimming function	Stand-by Period set to "+∞", Daylight Sensor set to "Disable"
☒ Three-step dimming function	Stand-by Period set to "10S/15minmin", Daylight Sensor not set to "Disable"
☐ Daylight harvesting	N/A
☐ Daylight priority	N/A

【Product Information】

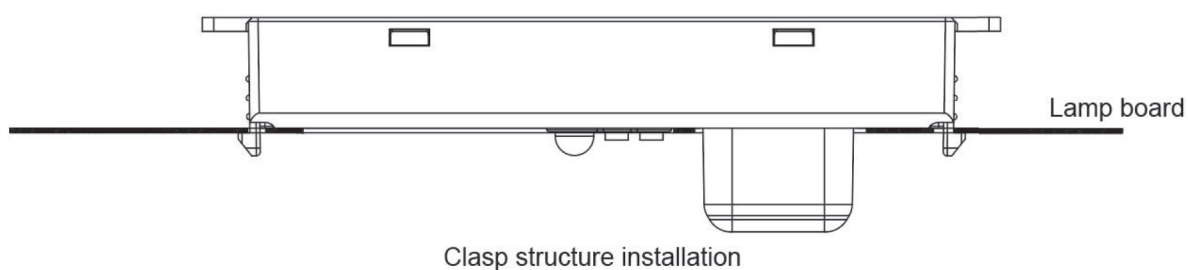
- Dimension(units: mm)



● Function & Wiring



● Installation Instruction



Note:

Note: The distance between microwave antenna and the metal plate and lamp housing must be greater than 3.2mm, and the metal plate step should not be higher than 2mm, otherwise it will affect the operation of the microwave antenna.

【DIP Switch Setting】

1. Dimming model

Function	Detection Area		Hold Time			Daylight Sensor			Stand-by period			Stand-by dim level	
Dial code	1	Detection area	2	3	Hold time	4	5	Light control value	6	7	Stand-by period	8	
I	ON	100%	ON	ON	5S	ON	ON	Disable	ON	ON	0S	ON	10%
II	-	50%	-	ON	90S	-	ON	50Lux	-	ON	10S	-	30%
III			ON	-	5min	ON	-	25Lux	ON	-	15min		
IV			-	-	10min	-	-	10Lux	-	-	+ ∞		

Function	Function selection	
Dial code	9	
I	ON	Sensor mode
II	-	Light ON

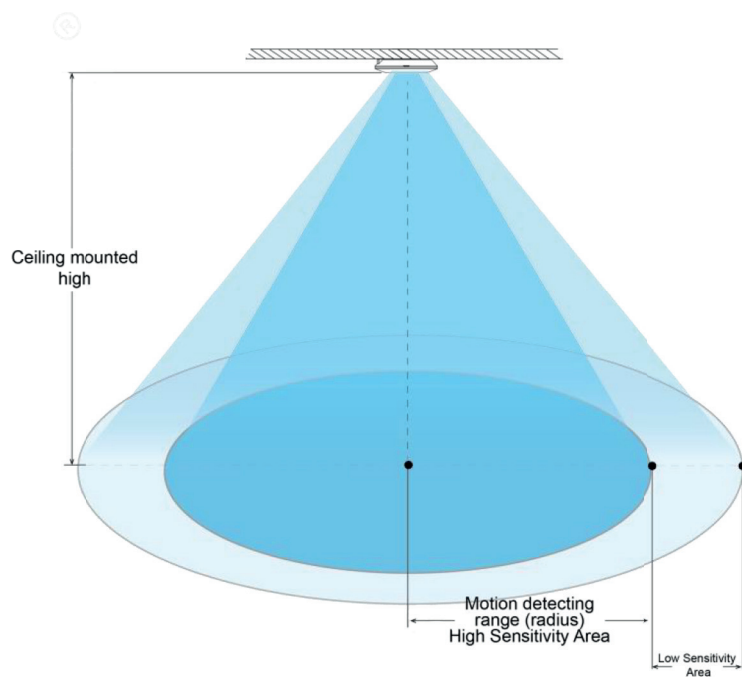
Note: when stand-by period dial code set to +∞, it will enter daylight priority, half-bright shutdown.

2. ON/OFF model

function	Detection Area			Hold Time				Daylight Sensor			
Dial code	1	2	Detection area	3	4	5	Hold time	6	7	8	Light control value
I	ON	ON	100%	ON	ON	ON	5S	ON	ON	ON	2Lux
II	-	ON	75%	-	ON	ON	30S	-	ON	ON	10Lux
III	ON	-	50%	ON	-	ON	1min	ON	-	ON	25Lux
IV	-	-	25%	-	-	ON	3min	-	-	ON	50Lux
V				ON	ON	-	5min	ON	ON	-	Disable
VI				-	ON	-	10min				
VII				ON	-	-	20min				
VIII				-	-	-	30min				

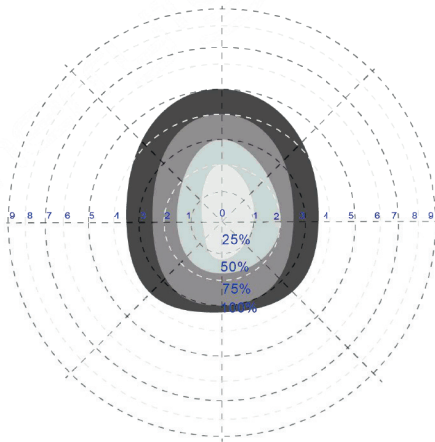
Function	Function selection	
Dial code	9	
I	ON	Dimming mode
II	-	ON/OFF mode

● Radiation Pattern

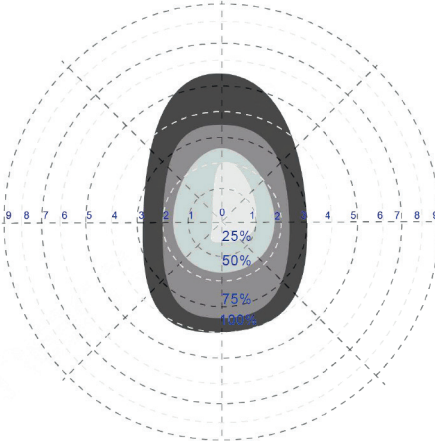


Ceiling mounting

Ceiling mounted height: 3m
Sensitivity: 100%/70%/50%/25%

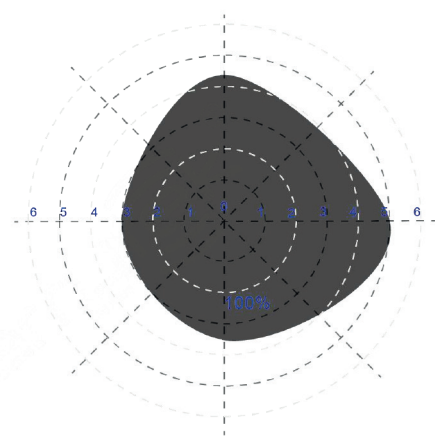


Normal moving (Speed: 1m/s)

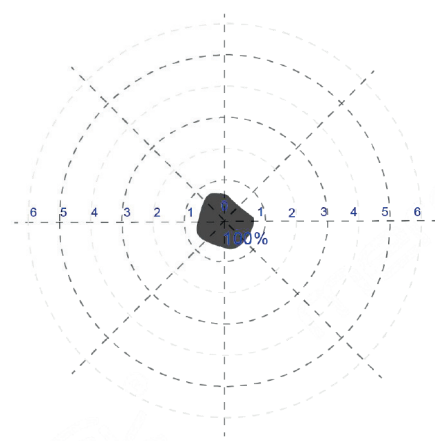


Slow moving (Speed: 0.3m/s)

Ceiling mounted height: 6m
Sensitivity: 100%



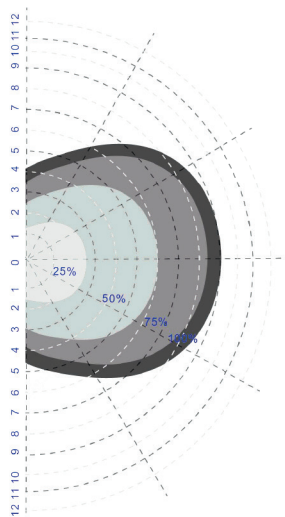
Normal moving (Speed: 1m/s)



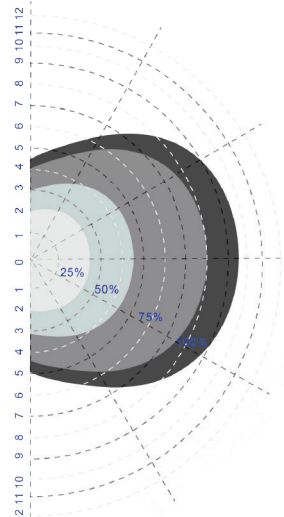
Slow moving (Speed: 0.3m/s)

Wall mounting:

Wall mounted height: 2m
Sensitivity: 100%/70%/50%/25%



Normal moving (Speed: 1m/s)



Slow moving (Speed: 0.3m/s)

【Initialization】

The light will be turned on 100% brightness after power on, and will be turned off after 10 seconds. During initialization, no external motion sensing signal will be detected.

【Default Setting】

Sensitivity: 100% Hold time: 5s Daylight sensor: Disable Stand-by period: 10s

Stand-by dim level:10%

【Application Notice】

- The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switch.
- Sensitivity area is related to moving speed of objects, size of moving objects, mounting height, mounting angle, working environment, reflecting materials and etc.. Given detecting area is typical value that was measured by 165cm/65kg testers in an indoor open environment.
- The detection area of the microwave sensor when installed on the wall will be greatly increased compared to when installed on the ceiling. If adopts wall ceiling, please reduce the sensitivity or contact our company to confirm the usage settings. The daylight thresholds are measured on a sunny day without shadow and in an ambient light diffuse reflection status. Different environment and climate cause different brightness values that daylight sensor measures.
- Sensor parameters may need to be reconfigured in different installation environments, please refer to the following instructions or contact the manufacturer.
- Sensor is for indoor use only. The waterproof effect for outdoor or half-outdoor use will be affected. Wind, rain, and moving objects may cause false triggering.
- The installation height of the sensor product cannot exceed 6 meters, and the optimal height is 3 meters. The distance between the two sensors should be greater than 3m.
- When the sensor is installed in a metal lamp, on a metal reflective surface, or in a small closed environment, the microwave will be reflected multiple times and cause false triggering. Please reduce the sensitivity of the sensor or contact the manufacturer for technical support.
- Please make sure that there are no moving signals such as fans, DC motors, sewer pipes, air outlets, etc. around the sensor, otherwise the sensor may cause false triggering.
- Microwaves cannot penetrate metal. Do not place product in a closed or a half-closed metal lamp. Neither metal nor glass is not allowed to cover above the product.
- Sensor are equipped with different PWM drivers, and the low-brightness effect may be different.
- DC regulated power supply with stable output voltage and low ripple coefficient must be used. The ripple of the power supply should be less than 100mV ; the load current should be greater than 30mA