

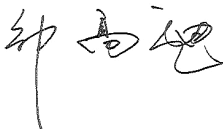
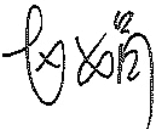
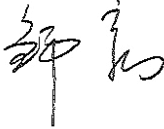

SPECIFICATION

Product Name: Sensor DIM LED Driver

Model No.: MLC18C-N

Issue Date: September 5, 2018

CUSTOMER APPROVED

PRODUCT DIRECTOR APPROVED	SALES CHECKED	R&D CHECKED	PREPARED
			

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1. Features



- Compact size design, can be built-in most of light fixtures.
- Integrated motion sensor and dimmable LED driver ,simple connection
- DIP setting allows the user easy to adjust sensor parameters

2. Parameter

Input	Operating Voltage Range	198-264V AC, 50Hz/60Hz
	Rated Voltage	220-240V AC, 50Hz/60Hz
	Input Current	0.11A MAX
	load Power	≥0.90 (230V full load)
	Stand-by Power	≤1W
	Working efficiency	85% Max.@230V AC(full load)
	Wiring method	Press terminal, wire diameter:0.5-0.75mm ²
Output	Working Model	Constant current
	Type of Load	LED
	No-load output voltage	60V DC Max
	Full load power	16W Max
	Load output voltage range	24-53V DC
	Load output current	300mA/350mA
	Wiring method	Press terminal, wire diameter:0.5-0.75mm ²
Sensor Parameters	Operating Frequency	5.8 GHz ±75 MHz , ISM Band.
	Transmitting power	0.5mW Max.
	Hold time	5S/ 1min /5min/10min
	Stand-by DIM Level	10%/25%
	Stand-by Period	0S/1min /10min/ +∞
	Detection Area	50%/100%
	Daylight Sensor	5Lux / 25Lux /50Lux / Disable
	Daylight on/off	N/A
	Detecting Radius	4-6m (mounting height 3m) (see note2)
	Mounting Height	6m Max.
	Detecting Angle	150° (Wall mounted), 360° (Ceiling mounted)

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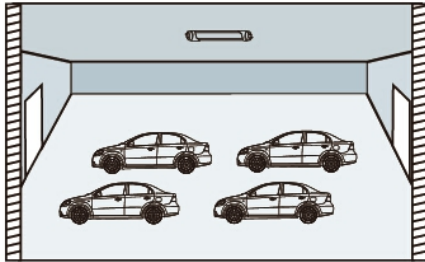
Wireless Module	Operating Frequency	N/A
	Transmitting power	N/A
	Transmitting distance	N/A
	Modulation mode	N/A
	Number of coding	N/A
Operating Environment	Operating Temperature	-25℃...+50℃
	Storage Temperature	-40℃...+80℃ (Humidity: 85% Non-condensing)
Certificate Standards	Safety standards	EN61347-1, EN61347-2-13
	EMC standards	EN55015, EN61547, EN61000-3-2, EN61000-3-3
	Environmental Requirement	Compliant to RoHS
	Certificate	CE
	IP Rating	IP20
	Protection Class	Class II
	Installation	Built-in
	Dimension	Φ68mm, H 26mm
	Net Weight	60.1g
	Package	Bubble bag+Clapboard + Carton(K=A)
	Lifetime	30,000h @Ta 230V full load

Note

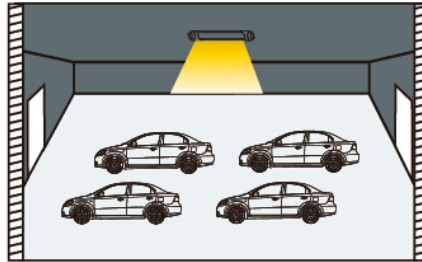
1. "N/A" means not available.
2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 165cm height person and walking speed is 0.5m/s.

2. Function

1) On/OFF Function(Stand-by period set at '0S')



- ① With sufficient ambient light, the light will not be switched on even if with motion signal.

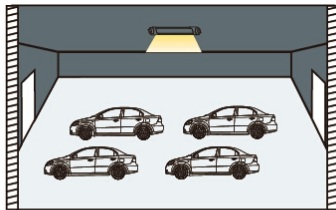


- ② With insufficient ambient light, the sensor switches on the light when motion is detected.

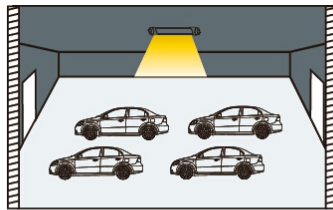


- ③ After elapse of hold time, the sensor switches off the light when no motion is detected.

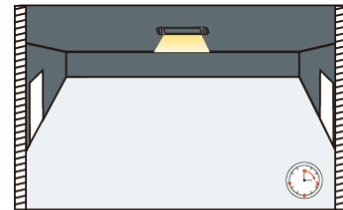
2) 2-step dimming function(stand-by period set at "+∞")



- ① If there is no motion detected, the light will be remained at a low light level all the time.

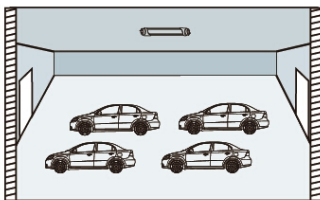


- ② When motion is detected, the sensor will switch on the light to 100% brightness

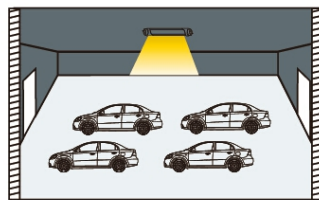


- ③ After elapse of hold time, the sensor dims the light at the present low light level if no motion is detected.

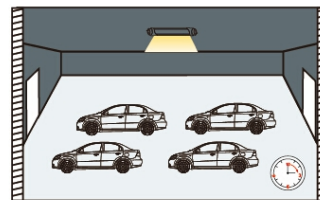
3) 3-step dimming function(Stand-by period set at '1min/10min')



- ① With sufficient ambient light, the light will not be switched on even if with motion signal.



- ② With insufficient ambient light, the sensor switches on the light when motion is detected.

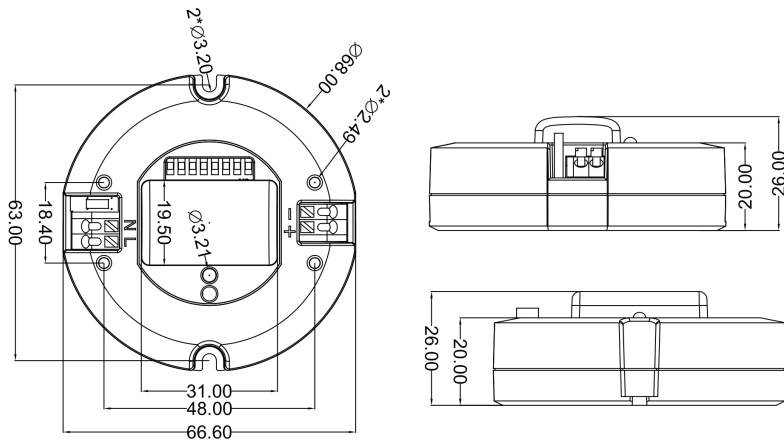


- ③ After elapse of hold time, the sensor dims the light at a low light level if no new motion is detected.

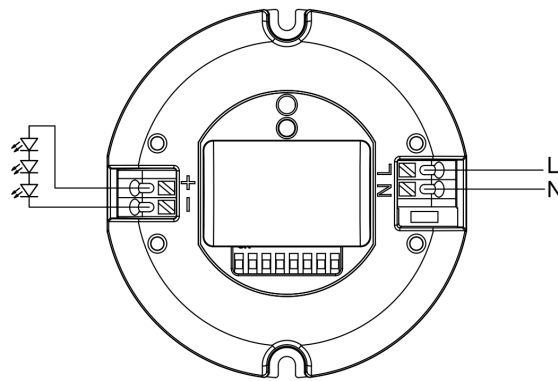


- ④ After elapse of standby period, the sensor switches off the light if no motion is detected in the detection zone.

4. Dimension (mm)

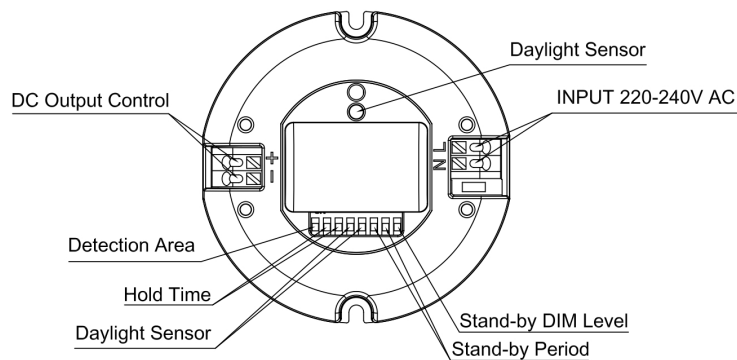


5. Wiring



*The sensor is designed for connect one load only. Connect more than one loads may damage the sensor.

6. Structure



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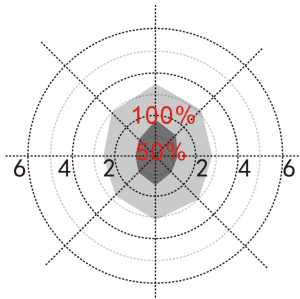
Website: www.merrytek.com

7. Radiation Pattern

Ceiling mounting

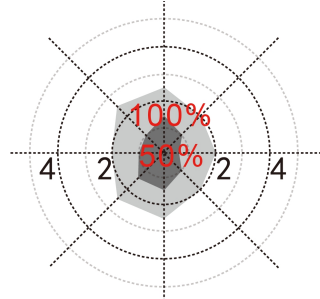
Ceiling mounted height: 3m

Sensitivity: 100%/50%

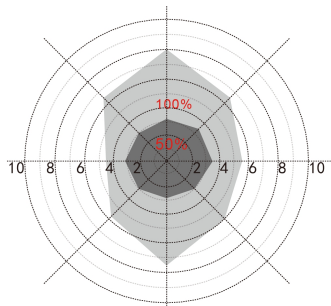


Ceiling mounted height: 6m

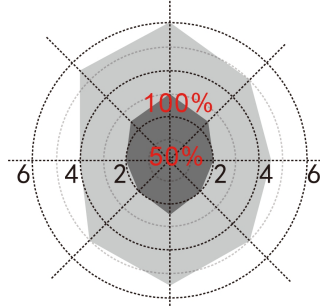
Sensitivity: 100%/50%



Normal moving (Speed:1m/s)



Normal moving (Speed:1m/s)



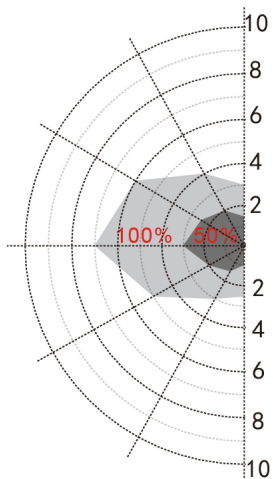
Slow moving (Speed 0.3m/s)

Slow moving (Speed: 0.3m/s)

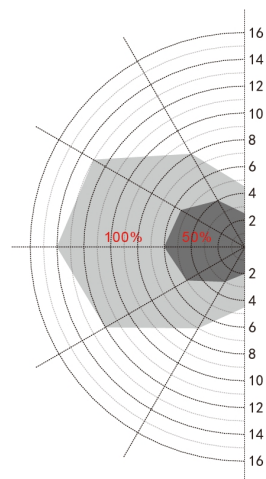
Wall mounting:

Horizon mounted height: 2m

Sensitivity: 100%/50%



Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)

8. DIP Switch Setting

Detection Area (Sensitivity)

	1	
I	ON	100%
II	-	50%

Hold Time

	2	3	
I	ON	ON	5S
II	ON	-	1min
III	-	ON	5min
IV	-	-	10min

Daylight Sensor

	4	5	
I	ON	ON	5Lux
II	ON	-	25Lux
III	-	ON	50Lux
IV	-	-	Disable*

*Disable means the daylight sensor does not work. The sensor will turn on light once motion is detected regardless of ambient light level.

Stand-by Period

	6	7	
I	ON	ON	0S
II	ON	-	1min
III	-	ON	10min
IV	-	-	+∞

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Stand-by DIM Level

	8	
I	ON	10%
II	-	25%

9. Initialization

1) On/Off function /3-step dimming function:

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it turns off the light. During the initialization, the sensor is not able to detect movement.

2) 2-step dimming function:

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it dims the light to a low light level (set by stand-by dim level). During the initialization, the sensor is not able to detect movement.

10. Factory Setting

Detection area: 100%, Hold Time: 5S, Daylight Sensor: Disable, Stand-by DIM level: 25%, Stand-by period: +∞

11. Application Notice

Be sure to power off before adjusting DIP switch setting.

12. Version Change

Version	Date	Description
A0	September 5, 2018	Released new product