

## MLC40C-P5 ON-OFF / 3-step Dimming function For LED Ceiling and Tri-proof Light



## Introduction

- On-Off / 3-step dimming function for LED ceiling and tri-proof light.
- Integration of microwave motion sensor, daylight.
- Automatic switching and dimming based on motion and light level.
- Output current can be set via DIP switch.
- Unique design with mini sensor detector makes the drivers suitable to fix within compact luminaries.
- Stand-by power  $\leq 1W$ .
- Detection area, Stand-by dimming level, time delay and daylight threshold can be precisely set via DIP switch.

Sensor DIM LED drivers, originally pioneered by Merrytek, are innovative products integrated with HF motion detector, daylight sensor and LED power supply.

The products supply a simple energy-saving solution for LED ceiling light and tri-proof light. The mini detector is separated from LED power supply, Unique design makes the drivers can be installed in luminaries which have limited space.



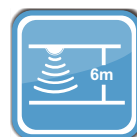
Max.6M



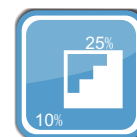
Light Sensor



Hold Time  
5s~10min



Mounting Height  
6m Max.



Automatic  
Dimming



5 Years  
Guarantee

## Optional Function

### ON-OFF Function

The products provide ON-OFF and steps dimming function for LED lighting, users can select the right function according to different applications.



With sufficient ambient light, the sensor does not switch on the lamp.

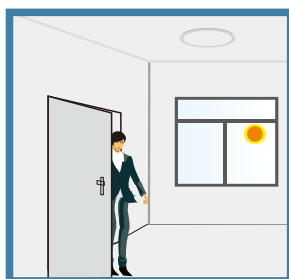


With insufficient ambient light, the sensor switches on the lamp when motion is detected.

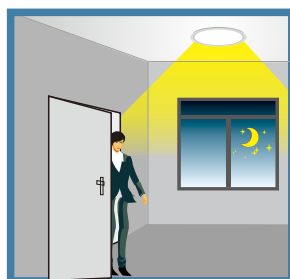


After hold time, the lamp gradually dims down if no motion detected.

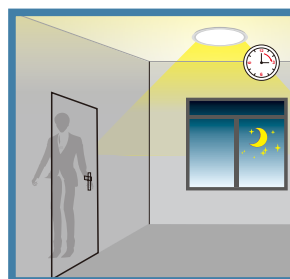
### 3-step dimming function



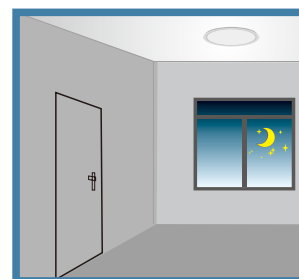
With sufficient ambient light, the sensor does not switch on the lamp.



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



After hold time, the sensor dims the lamp at a low light level if no new motion trigger.



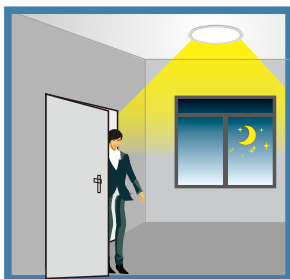
After stand-by period, the sensor switches off the lamp if no motion is detected in its detection zone.

### 2-step dimming function

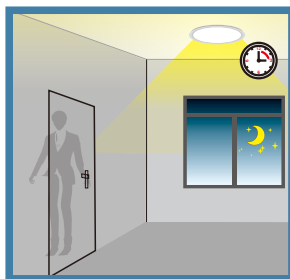
Also, the sensors can provide 2-step dimming function, 100 %---> low light (Never turn off). They are particularly suitable for use in corridors, stairwells and underground passages where low light levels are maintained until motion is detected.



No motion detected, the lamp remains at a low light level all the time.

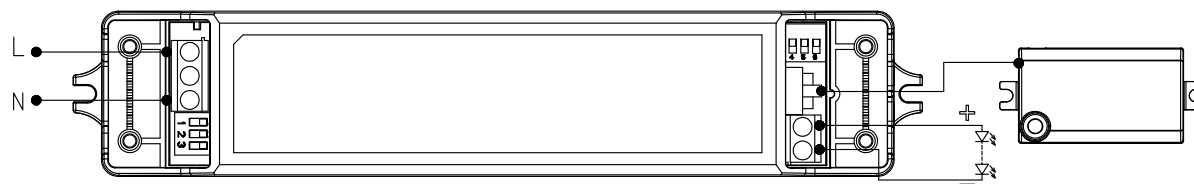


When motion is detected, the sensor brightens the lamp to 100% illumination.

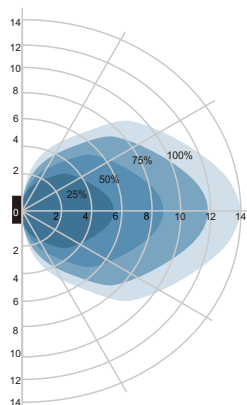


After the hold time, the sensor dims the lamp at the preset low light level if no motion is detected.

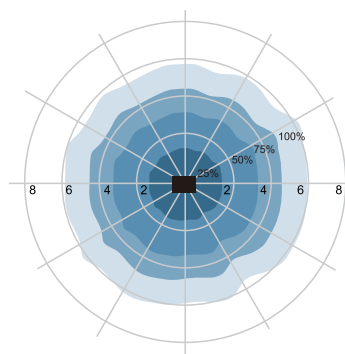
## Wiring scheme



## Detection Pattern

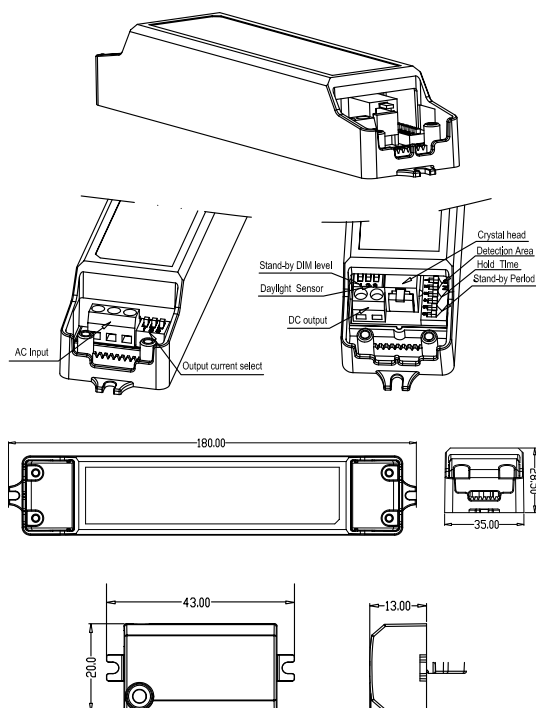


Wall mounting pattern (Unit: m)  
Suggested installation height: 1-1.8m



Ceiling mounting pattern (Unit: m)  
Suggested installation height: 2.5-6m

## Technical Parameters




### MLC40C-P5

Input Voltage	220~240Vac
Output	30-50V dc;400mA/500mA/600mA/700mA
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW
Power consumption	≤(ulstand-by)
Detection Area(Radius)	6m Max.
Max. Mounting height	8m
Daylight sensor	10lux/30lux/50lux/100lux/Disable
Hold time	5s/90s/5min/25min
Stand-by Period	1min/5min/25min/+∞
Stand-by DIM Level	0%/10%/25%/50%
Operating temperature	-20℃~50℃
IP rating	IP20

## Setting

By selecting the combination on the DIP switch, sensor data can be precisely set for each specific application.


		1	2	3	
ON ↑ 	I	ON	ON	ON	10Lux
	II	ON	ON	-	30Lux
	III	ON	-	ON	50Lux
	IV	-	ON	ON	100Lux
	V	-	-	-	Disable

### Daylight Sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.

When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient d light level.


50Lux, 100Lux: Twilight operation, 10Lux, 30Lux: Darkness operation Only.

		4	5	
ON ↑ 	I	ON	ON	1min
	II	ON	-	5min
	III	-	ON	25min
	IV	-	-	+∞

### Stand-by Period


Refers to the time period the lamp remains at a low light level before it completely switches off in the long absence of people.

When set to "+∞", the low light is maintained until motion is detected.

		1	2	
ON ↑ 	I	ON	ON	100%
	II	ON	-	75%
	III	-	ON	50%
	IV	-	-	25%


### Detection Area

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely each application.

		3	4	
ON ↑ 	I	ON	ON	5s
	II	ON	-	90s
	III	-	ON	5min
	IV	-	-	25min

### Hold Time

Refers to the time period the lamp remains at 100% illumination after no motion detected.

		5	6	
ON ↑ 	I	ON	ON	0%
	II	ON	-	10%
	III	-	ON	25%
	IV	-	-	50%

### Dimming Level

The low light level you would like to have after the hold time in the long absence of people.

## Output Current Setting

Output Current (mA)	S1	S2	S3
700	ON	ON	ON
600	ON	ON	-
500	ON	-	-
400	-	-	-