CCT Select Polycarbonate Ceiling Light

Basic, Simple Sensor & Simple Sensor PLUS

Advantages

- 3 colour temperatures selection in one luminaire
- High lumen output, energy saving
- Slim and rigid body design

More advantages with Simple Sensor PLUS

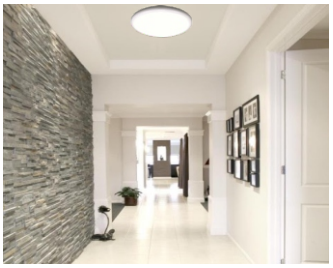
- Energy Saving : The light come on only when it has been triggered which eliminates the need to keep your lights on all the time.
- More Convenience : You can have the lights on as soon as motion detected
- Improve Security : Lights switch on automatically when motion detected, can be a deterrent in the event of home intrusion.

Lit by LUMILEDS

Features

- Ø250mm, Ø320mm
- 14W, 20W
- CRI>80
- **LUMILEDS** 2835 LED chips
- Built-in driver
- 3 Colour temperatures selection
- Non dim driver & PWM dimming driver
- Simple Sensor & Simple Sensor PLUS available as an option.
- Foyer, Corridor, Bed room, Toilet, Kitchen, Store room.

Kitchen

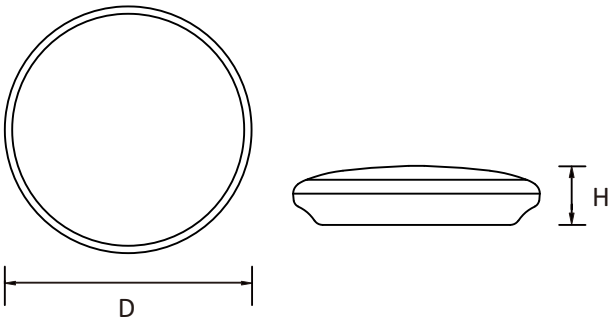


Corridor

Living Room

Toilet

Dimensions

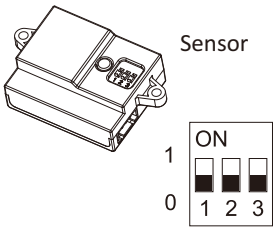


Model	Diameter D(mm)	Height H(mm)
MC25PC14 / MC25PC14-EM MC25PC14-SS / MC25PC14-SS-EM MC25PC14-SP / MC25PC14-SP-EM	Ø250	60
MC32PC20 / MC32PC20-EM MC32PC20-SS / MC32PC20-SS-EM MC32PC20-SP / MC32PC20-SP-EM	Ø320	60

Key Specifications

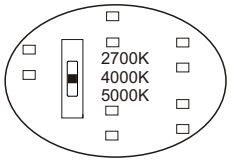
Model	MC25PC14	MC32PC20	MC25PC14-SS	MC32PC20-SS	MC25PC14-SP	MC32PC20-SP
Type	Basic		Simple Sensor		Simple Sensor PLUS	
Complete Fixture						
Colour Temperature	2700/3000/4000K or 3000/4000/5000K(By selector switch)				2700K~5000K(By remote)	
Service Life	L80 B20 35,000 hours					
Light Source	**LUMILEDS** 2835 chips 0.5W					
Led Chips (pcs)	120 x 2	180 x 2	120 x 2	180 x 2	120 x 2	180 x 2
Mounting Method	Surface mount on the ceiling					
Connected Load	14W	20W	15W	21W	15W	21W
Rated Luminous Flux	1300Lm	2000Lm	1300Lm	2000Lm	1300Lm	2000Lm
Luminous Efficacy	93Lm/W	100Lm/W	87Lm/W	95Lm/W	87Lm/W	95Lm/W
Colour Rendering Index	80					
Colour Tolerance	≤ 5 SDCM					
Luminaire Colour	Base & frame white RAL9016, Opal diffuser					
Material	Body Polycarbonate (PC) V0, diffuser PC V2					
Beam Angle	120°					
Class	II					
IP Rating	IP44 from front					
Glow Wire Test	Body 850°C, diffuser 650°C					
Ambient Temperature	-20 to 40°C					
Driver (Ripple free)	Non dimmable, Double insulation		PWM driver, completed with Sensor Control			
Input Current	61mA	87mA	61mA	87mA	61mA	87mA
Input Voltage	220-240Vac 50/60Hz					
Power Factor	>0.9					
Output Power	12W	18W	12W	18W	12W	18W
Output Voltage	36Vdc					
Output Current	330mA	500mA	330mA	500mA	330mA	500mA

Simple Sensor Functions (SS)



Simple Sensor

- With 5.8 GHz microwave sensor & light sensor

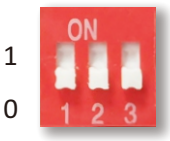


CCT Changeable

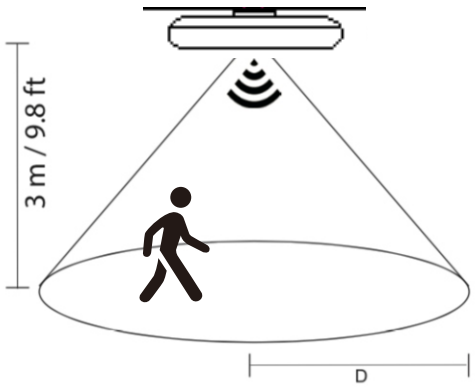
- Selector switch over LED plate

1. Dip Switch Setting

Function	Timer Setting		Sensing Distance	Standby Brightness
Dip switch	1		2	3
1	If no motion is detected in 10 mins, the luminaire will dim down to 50% brightness. If no motion is detected in another 5 mins, the luminaire will dim down to standby light mode.	■ 10min (dim to 50%) 5min (dim to standby)	■ Far 6m	■ 20%
0	If no motion is detected in 3 mins, the luminaire will dim down to 50% brightness. If no motion is detected in another 2 mins, the luminaire will dim down to standby light mode.	■ 3min (dim to 50%) 2min (dim to standby)	■ Near 3m	■ 0% Lights off

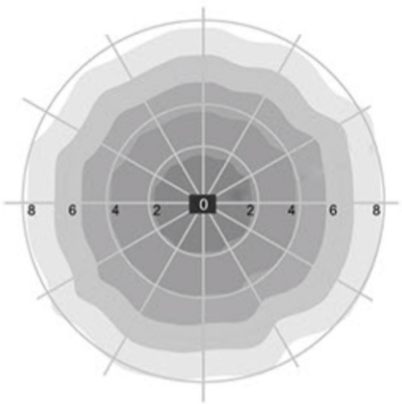


Sensing distance



Near (3m) / Far (6m)

Detection Patterns (Installed on the ceiling)



360°

2. Auto Test

Test mode to indicate the radar function is enabled

- Once switch ON the light, it will be turned off automatically after 5 sec. Any motion trigger the sensor will go back to normal function settings.
- This auto test will repeat the test function each time if the wall switch is switch off and on again.

3. Switching Microwave Sensor ON & OFF

Quickly switching the wall switch ON & OFF 3 times.

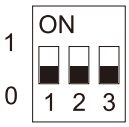
- Sensor **OFF** :

* luminaire flashes 2 times to indicate the sensor is **OFF**, lights will then stay **ON**

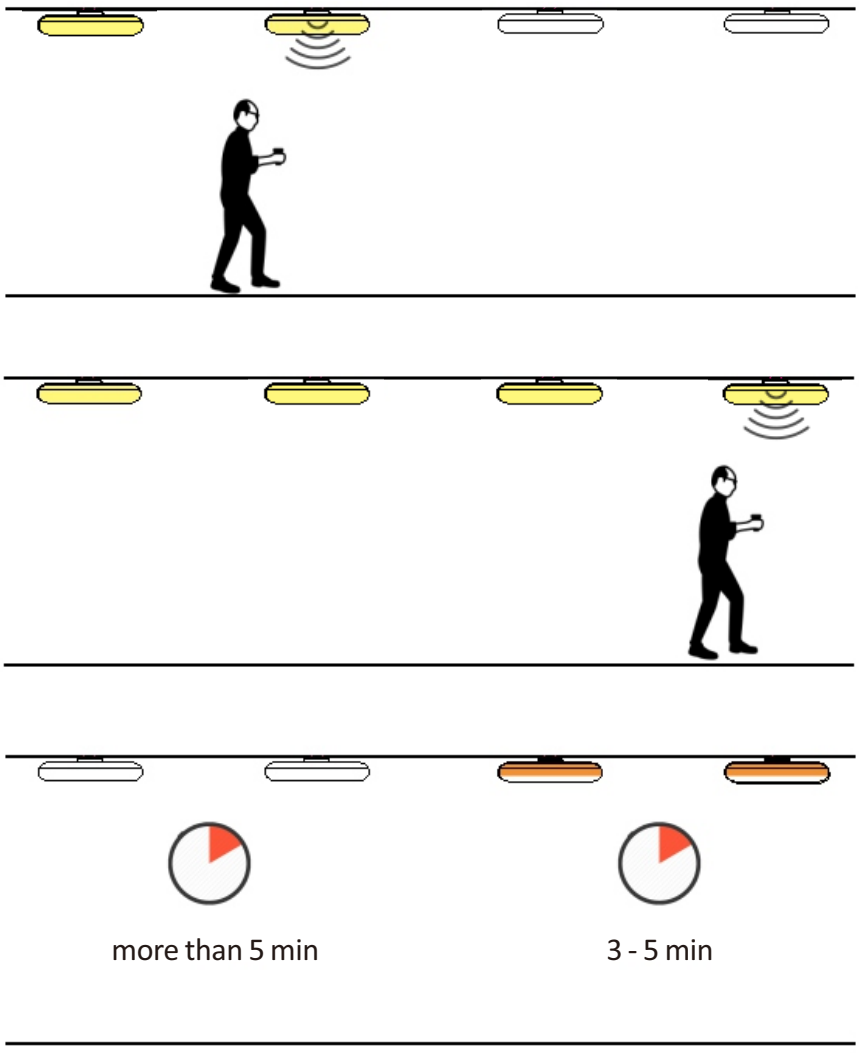
- Sensor **ON** :

* luminaire flashes 2 times to indicate the sensor is **ON**, and the lights will automatically go **OFF**

Example of Corridor Setting



- Time setting : 5min
- Sensing distance: Near
- Standby brightness: 0%

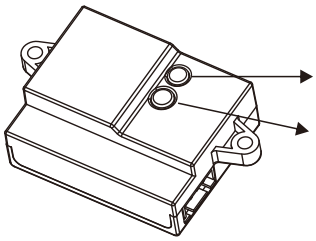


1. When motion sensor has been triggered, the luminaire turns to 100% brightness.

2. If there's no detection of motion, the controller will start count to 5 minutes delay time.

3. After 3 min, luminaire will dim down to 50% brightness, and switch OFF after 2 min.

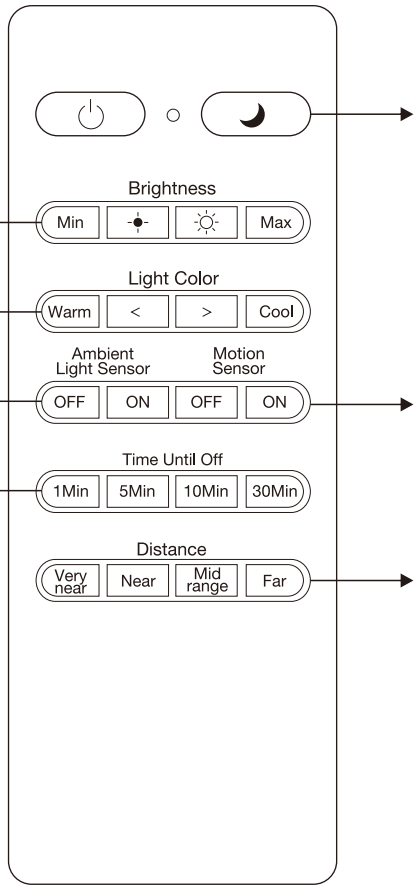
Simple Sensor PLUS Functions (SP)



Simple Sensor PLUS

- With 5.8 GHz microwave sensor & Infrared Receiver & light sensor

Remote Settings



Night mode
DIM down the light to 10% brightness and warm white

Adjustable brightness level

Adjustable color temperature

Ambient light sensor control
prevents the light from turning on during day time when motion is detected

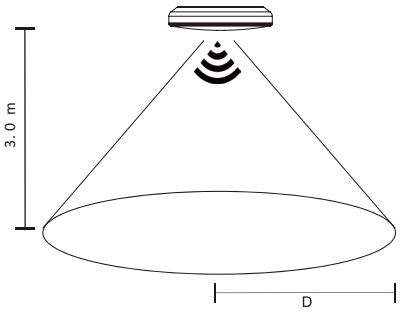
Motion sensor control
Enables/Disables motion sensor feature to manually turn the light ON/OFF

Timer for auto shut-off
(1 min, 5 min, 10 min, 30 min)

Adjustable motion detection range

Distance

Distance is the maximum motion detection range. You can choose from various settings: Very near, Near, Mid-range and Far. The sensing distance would be ranged from around 1 m to 7 m. You may refer to the table below for the maximum sensing distance for the light installed at a height of 3.0 m.



Setting	Maximum Sensing Distance (D)
Very near	1 m - 2 m
Near	2 m - 3.5 m
Mid-range	3.5 m - 5 m
Far	5 m - 7 m

Sensor Specification

Model	MC25PC14-SS / MC25PC14-SS-EM MC32PC20-SS / MC32PC20-SS-EM	MC25PC14-SP / MC25PC14-SP-EM MC32PC20-SP / MC32PC20-SP-EM
Electrical Parameters		
Input Voltage	DC5V	
Input Current	20-25mA	
Standby Power	<0.9W	
Output Voltage	DC 5V(PWM)	
Microwave Sensor Parameters		
Microwave Frequency	5.8GHz ± 75MHz	
Transmission Power	<0.5m W	
Colour Changeable	By dip switch	By IR remote

Emergency Model Technical Data

Model	MC25PC14-EM	MC32PC20-EM	MC25PC14-SS-EM	MC32PC20-SS-EM	MC25PC14-SP-EM	MC32PC20-SP-EM
Total Rating	14W	20W	15W	21W	15W	21W

Inverter

Input Voltage	220-240Vac, 560Hz
Output Voltage	36Vdc, SELV
Monthly and Annual Test	Self testing per month and per year
System	Auto test
Type	Maintained
Max charging time to 100%	< 6 hours

Battery

Type	2 x 18650 Li-Fe Po4
Voltage	6.4Vdc
Capacity	1500mAH
Minimum Lumen Output	180Lm 2W > 3 hours
	270Lm 3W > 2 hours
	450Lm 5W > 1 hours

Approval Standard

CE	**CE-LVD**	EN 60598-1:2015/A1:2018,EN 60598-2-1:1989,EN 62031:2008+A1:2013+A2:2015, EN 62493:2015 EN 61347-2-7
	CE-EMC	EN 55015:2013+A1:2015,EN 61000-3-2:2014,EN 61000-3-3:2013,EN 61547:2009
	CE-RED	ETSI EN 301 489-1 V2.2.0: 2017,ETSI EN 301 489-3 V2.1.1: 2017 ETSI EN300 440 V2.2.0: 2017,EN 62479: 2010
RoHS		RoHS 2.0 (EU)2015/863

Packing Details

Inner Box	**Inner Packing**	4 color printed box
	Instruction Sheet	One color printed
Outer Cartoon	**Qty Per Cartoon**	10
	Type of Box	3 layer corrugated cartoon box

With Emergency

The Need for Emergency Lighting

The tragedies in the past bring us more focus on the importance of life safety, emergency lighting and compliance. Emergency lighting serve as an example of continuing needs on safety means allow egress/escape for building occupants during emergency situations including:

a. When utility power failure, utility power voltage reduction (brownout) below the minimum required standards or

b. Power interruptions in the building, including total power loss or individual phase or branch circuit failure, fire and/or smoke in the building, and

c. Natural disaster including earthquake, tornado, hurricane, flood.

Every commercial, industrial, and institutional building is required to be equipped with various types of life safety equipment.

In short, general life safety concerns with increasing insurance and liability considerations, make it incumbent upon everyone involved.

Emergency lighting should be treated as life safety equipment.

Emergency Advantages :

Provide safe and constant lighting for people within the premises to evacuate calmly when the main power is cutoff.
When the main power being cutoff for some reason, you can reduce the amount of expensive hours lost to non-productivity.
When a fire occurs and there is a blackout, emergency lighting will make it easier to leave the building safely and calmly for everyone.

Features:

Self-diagnostics System
Under the law, emergency lighting systems need to be regularly tested and maintained in full working order.
In order to avoid the high manpower cost and disruption of manual testing, automatic test systems should be considered.
Autotest is a stand alone self-test system, designed for use with self-contained emergency lighting, the testing module self calibrates and carries out testing at predetermined intervals.

Tel : (852) 2690 4500
Fax : (852) 2690 4530
Email : info@mastertec.cc
www. mastertecholdings. com

Head Office : Mastertec Holdings Limited
Address : 1812 Fo Tan Industrial Centre, 26-28 Au Pui Wan Street, Shatin,N.T.,
Factory : Guangdong Mage Intelligent Lighting Co. Ltd.
Address : Block2, Beishui Industrial Area, Beishui Intersection, Xingtan, Shunde, Foshan, Guangdong.