# Quick Connect IP66 batten with cable through MERRYTEK sensor, emergency models

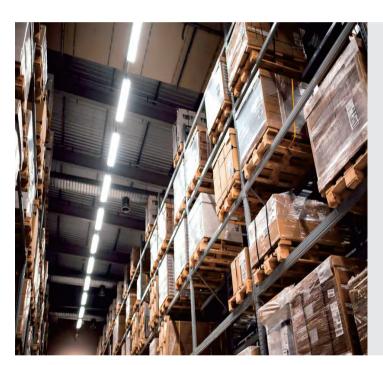






- Quick connection by clips
- Full range of Straight, Elbow, Tee and Cross connector plus Dummy body and Dummy body connector to make most possible lighting configuration
- Equipped with Philips Certadrive drivers for Standard Models, Xitanium drivers for Emergency Models,
   Ripple free and meet new EPREL requirement
- MERRYTEK sensor for Occupancy comfort and energy saving
- Emergency models available





#### **Features**

- 3 measurement for selection 600mm, 1200mm, 1500mm
- 3000 and 5000K LG or LumiLEDs 2835 chips to create 3000K, 4000K and 5000K in one body
- CRI>80
- High efficacy 120Lm/w
- All straight, Elbow, Tee and Cross connectors equipped with 1.5mm<sup>2</sup> cable for connection to next batten/battens
- Dummy body with Dummy body connector for continuous connections with illuminated battens for better lighting plan
- Individual mounted or continuous mounted battens to make installation easy and efficient
- Nice looking battens and installation method to form a decorative part of the interior design









Garage Car Park Footbridge Producton Line



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## **General specifications**

Model	600mm   1200mm   1500mm				
Structure for all models					
Body and Diffuser	Polycarbonate extrusion with white body and opal diffuser				
End cap	Polycarbonate injection moulding in white				
Gearplate	Aluminium extrusion epoxy power coat				
Accessories	Cable gland x 2, Mounting bracket x 2, V shape hook x 2, fixing screw set x2				
Connectors	Straight, Elbow, Tee and Cross c/w 1.5mm² cable for connecting to other batten/battens				
Cable through	$5 \times 1.5 \text{mm}^2$ cable through from one to the other end with $5$ pole terminal block $\times 2$				
IP rating	66				
IK rating	8				
Dimension ( mm )	600x83x63   1200x83x63   1500x83x63				
Working condition and Warranty					
Ambient temperature ( °C )	-25 to 35				
Working Humidity ( % )	10 to 90				
Life time ( Hours )	50,000				
Warranty	5 years or 35,000 hours whichever come first				
Compliant	CE-LVD, CE-EMC, RoHS				



















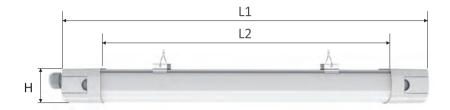




## **Dimension**

### 1. Standard and Emergency model



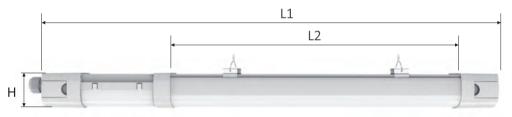




Model	Length L1 ( mm )	Length L2 ( mm )	Width W ( mm )	Height H ( mm )
QC6018	600	460	83	63
QC12036 QC12036E	1200	1060	83	63
QC15050 QC15050E	1500	1360	83	63

### 2. Sensor with and without emergency







Model	Length L1 ( mm )	Length L2 ( mm )	Width W ( mm )	Height H ( mm )
QC6018S	760	460	83	63
QC12036S QC12036SE	1360	1060	83	63
QC15050S QC15050SE	1660	1360	83	63

## Standard Models with and without Sensor

Model	QC6018	QC6018S	-	QC12036	1	QC12036S	1	QC15050	QC15050S
MERRTEK sensor	Χ	MC098S		X	-	MC098S		Х	MC098S
Electrical data									
Driver model ( Philips Certadrive )	9290 02	8 74380		9290	028	74480		9290	)28 74580
Driver description	CertaDrive 19W 20	)/350mA 54V 230V		CertaDrive 44W	200/3	50mA 125V 230V		CertaDrive 65W	200/350mA 185V 230V
Input voltage ( Vac )				220-24	0Va	c, 50Hz			
Max Input current ( mA )	10	0	-		230		1		330
Input power ( W )	1	3			35				47
Power factor					>0.9	ı			
Driver Efficiency (%)	8	6			91				92
Output voltage ( Vdc )	4	8			96				135
Output current ( mA )					350				
Output Ripple LF				:	≤ 5%	)			
Output Ripple HF				≤	15%	6			
Class					1				
Inrush current ( A )	9.	)8			14.2		-		15
THD				<	<12%	6			
Surge protection Diff/common mode (	KV)				1/2				
Short circuit protection					Yes				
Overload protection					Yes				
Over power protection					Yes				
Max no protected by 16A Type B MCB (	<b>Pcs</b> ) 7	2			36		T		31
Photometric data									
Ra				>	-80				
Color temperature ( K )		Can	set t	o 3000 or 400	0 or	5000K by Dip-	-SW	itch	
Lumen Output at 3000K ( Lm )	1900	)		4	000		T	į	5300
Lumen Output at 4000K ( Lm )	2100	)		4	400		1	į	5900
Lumen Output at 5000K ( Lm )	2000	)		4	200		1	į	800
Color tolerance				≤ 5	SDC	M			
LED chips		LG or LumiL	EDs	2835 , 0.5W, 3\	√dc c	or equivalent 30	000	and 5000K	
No of chips	2 x 4	3	1	2	x 96		-	2	x 135
Beam angle				1	10°				

## **Emergency model with and without sensor**

Model			QC12036E	-	QC12036SE	1	QC15050E	QC15050SE
MERRTEK se	ensor		X		MC098S	1	X	MC098S
Emergency P	ower Supply		✓		✓	1	✓	<b>√</b>
Electrical da	nta							
Driver mode	el ( Philips Xitanium )		9290	0283	1880		9290 02	8 31980
Driver descr	ription		Xitanium 41W 0.5-0.8A 51V DS 230V Xitanium 54W 0.9/1.05A 51V DS					
Input voltag	ge ( Vac )		220-240Vac, 50Hz					
Max Input c	urrent ( mA )		260 290				90	
Input power	r ( W )			35			4	7
Power facto	r			>0.9				
Driver Effici	ency ( % )			88		Ī	8	9
Output volt	age ( Vdc )			39			3	9
Output curr	ent ( mA )			800		1	10	50
Output Ripp	ole LF			≤ 4%				
Class				Ш				
Inrush curre	ent ( A )			15.3		-	21	7
THD			<	<20%				
Surge prote	ction Diff/common mode ( KV )			1/2				
Short circuit	t protection			Yes				
Overload pr	otection			Yes				
Over power	protection			Yes				
Max no prot	ected by 16A Type B MCB ( Pcs )			50			3	8
Photometric	data							
Ra				>80				
Color temper	rature ( K )		Can set to 3000 or 40	00 or	5000K by Dip-	sw	itch	
Lumen Outpu	ut at 3000K ( Lm )	1900		4000			53	00
Lumen Outpu	ut at 4000K ( Lm )	2100	1	4400		1	59	00
Lumen Outpu	ut at 5000K ( Lm )	2000		4200			58	00
Color toleran	nce		≤ 5	5 SDC	M			
LED chips		LG or L	umiLEDs 2835 , 0.5W, 3	3Vdc c	or equivalent 30	000	and 5000K	
No of chips	Standard and Sensor models:	2 x 48	1	2 x 96		T	2 x	135
140 OI CIIIPS	Emergency models:		1 2	2 x 98		1	2 x	140
Beam angle				110°				

## **Specification of Auto-test Emergency Supply**



Parameter	Description
Inverter Dimension ( mm )	157.5 X 30.4 X 21mm
Input Voltage	220-240Vac, 50/60Hz
Output Voltage	1.5/1.8m : 50-200Vdc
Battery type	LiFePO₄ 1500mAH 6.4Vdc
Charge time	<24 hours
Designed Life	>4 Years
Operating Temp. (°C)	0 - 50°C
Emergency Power Output	2.5W
Work Mode	Switch ON/OFF, maintain and non-maintain depending on wiring as indicated below
Indicator Light	To show the status of the inverter and battery
Protection	Over-Charge / Over-Discharge
Operating time for 2.5W	>3.0 hours

### **Installation Method**



Ceiling and wall mounted Good for most installaton environment.



Pendant Mounted This installaton method is good for high ceiling taller than 3m.

## **Suspension accessories**



Suspension wire Adjustable length of 3M max for pendant mounted



Hook and mounting bracket for pendant mounted



Safety screws for mounting bracket

## **Connectors**

Picture	Code	Dimension(mm)	Description
1	QCSC	95 x 83 x 63	Straight Connector with 5x1.5mm² cable 250mm long
N	QCLC	130 x 130 x 63	Elbow Connector with 5x1.5mm² cable 350mm long
-	ОСТС	180 x 130 x 63	Tee Connector with 10x1.5mm² cable 350mm long
S	QCCC	180 x 180 x 63	Cross Connector with 15x1.5mm² cable 350mm long
Do	QCDBC	70 x 83x 63	Dummy body connector









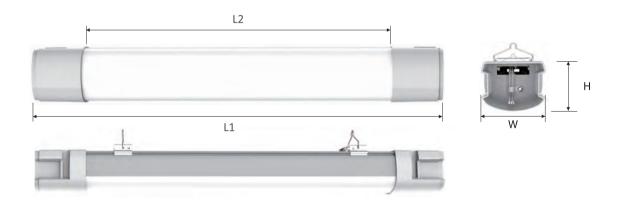
1.Straight

2.Elbow

3.Tee

4.Cross

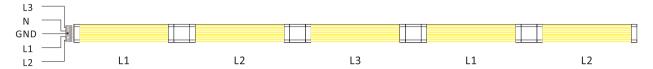
## **Dummy body**



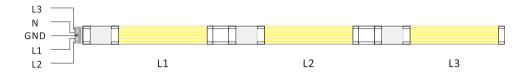
Model	Length L1 ( mm )	Length L2 ( mm )	Width W ( mm )	Height H ( mm )
QC60DB	600	460	83	63
QC120DB	1200	1060	83	63
QC1505DB	1500	1360	83	63

## Flexible and amazing configurations

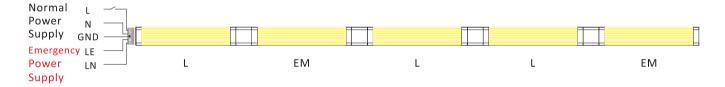
#### 1. 3 phase connection for basic models



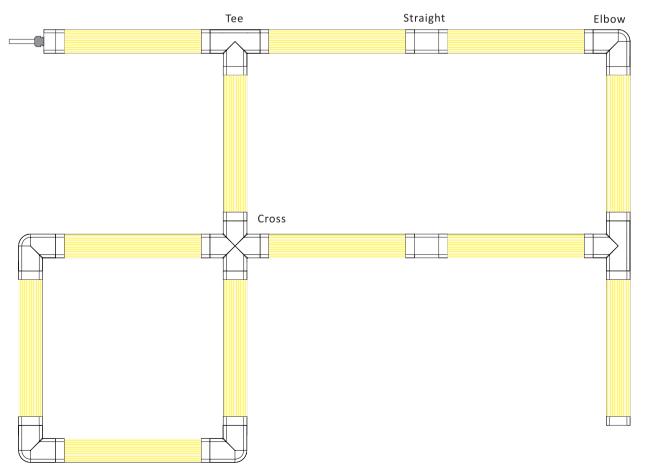
#### 2.3 Phase connections with sensor



#### 3. Single phase connections with emergency

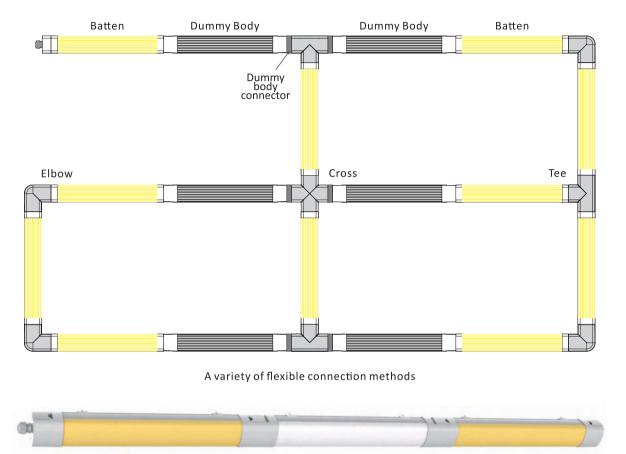


#### 4. Special connections example by different connectors



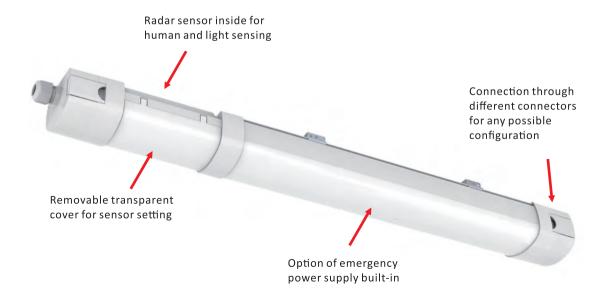
#### 4. Batten and Dummy Body connection

With all different connectors, dummy body and battens, you can make IP66 continuous connection and all possible configuration as per your functional and decorative installation

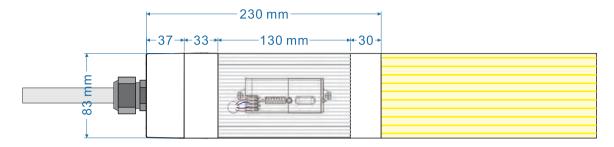


Batten, Dummy body connector, Dummy body, Dimmy body connector, batten

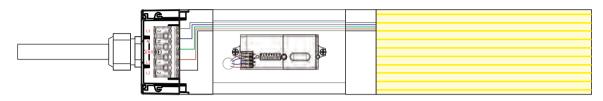
## Sensor model physical look



#### Plain view of batten with MC098S sensor



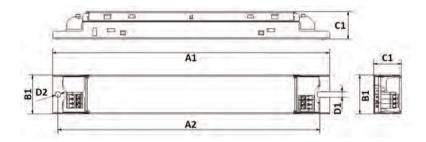
#### Inside connection of batten with MC098S sensor



## Driver specifications for all models

#### **PHILIPS**

Driver Model	A1(mm)	A2(mm)	B1 (mm)	C1(mm)	D1(mm)	D2(mm)
929002874380	210	198.5	30	21	4.1	4.1
929002874480	210	198.5	30	21	4.1	4.1
929002874580	210	198.5	30	21	4.1	4.1

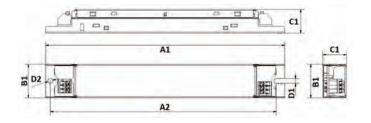


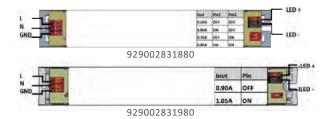


## **Driver specifications for all Emergency**

### **PHILIPS**

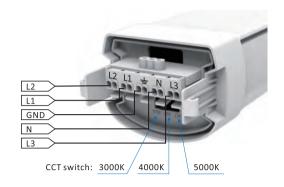
Driver Model	A1(mm)	A2(mm)	B1(mm)	C1(mm)	D1(mm)	D2(mm)
929002831880	188	176.4	30.2	21	4.1	4.1
929002831980	210	198.4	30.2	21	4	4



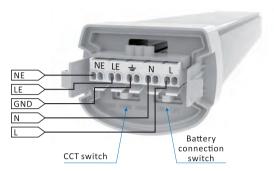


## Wiring diagram

#### 1. Standard and Sensor models



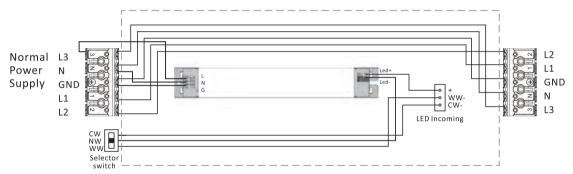
#### 2. All Emergency models



After installation completed, connect the battery by switch on the battery connection switch

#### 1. Wiring diagram of Standard models

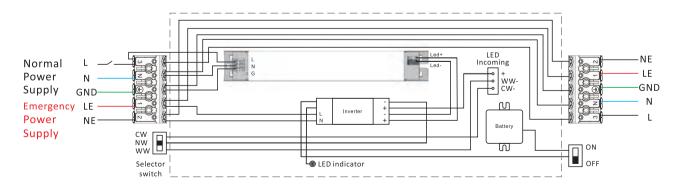




Live connected on incoming side for Easy switching to L1 or L2

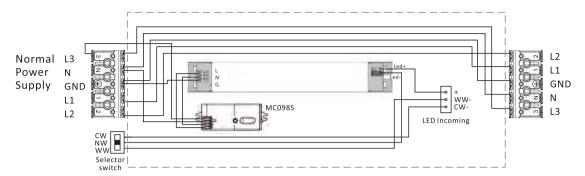
#### 2. Wiring diagram of models with Emergency supply

### **PHILIPS**



#### 3. Wiring diagram of sensor models

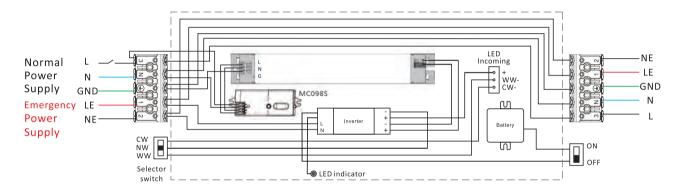




Live connected on incoming side for Easy switching to L1 or L2  $\,$ 

#### 4. Wiring diagram of models with sensor and emergency supply





## **How Quick Connect work with sensor**

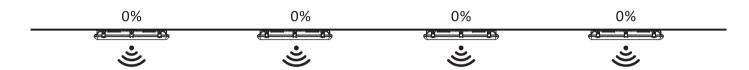
### Sensing distance

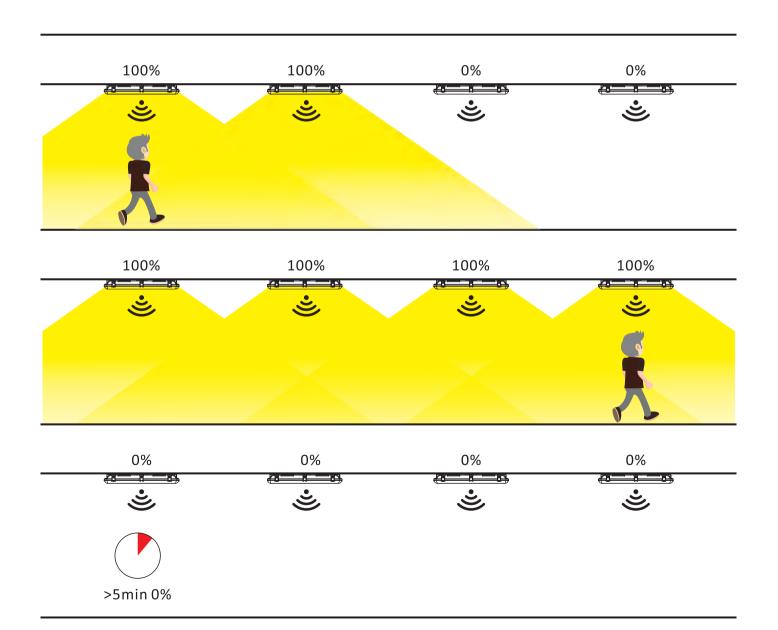
#### Setting the following by the dip-switch in the sensor

**Sensing distance** : 1-2m, 2-4m, 4-6m, 6-8m **Hold time** :5s, 30s, 90s, 5min, 20min, 30min Daylight threshold: 2Lux, 10Lux, 30Lux, 50Lux, Disable

Override sensor : Quick switch ON/OFF 3 times within 2sec to override sensor function. Lights will switch on all the time.

Power off and on again to recover sensor function.





## **MERRYTEK** sensor specifications

### 1. Features





MC098S

- Ultra-slim design for Tri-proof LED light
- Patented antenna design makes reliable detecting, avoid missing triggered when sensor built-in backside of metal LED plate.
- Adjustable detecting sensitivity via DIP switches, suitable to variety of installation sites.
- Support 6m Max. Mounting height.
- 5 years warranty

#### 2. Parameter

	Operating Voltage Rage	198-264V AC, 50Hz/60Hz				
	Rated Voltage	220-240V AC, 50Hz/60Hz				
Input	Stand-by Power	≤0.5W				
	Surge Test	LN: 1kV				
	Working Mode	ON/OFF function				
	Type of Load	Inductive or Resistive				
Output	Load Capacity	400W(Inductive); 800W(Resistive)				
Output	Load Capacity	400W(muttive), 800W(Nesistive)				
	Max. Surge Capacity	30A (50% Ipeak, twidth =500uS, 230Vac full load, cold start); 60A (50% Ipeak, twidth =200uS, 230Vac, full load, cold start )				
	Operating Frequency	5.8 GHz ±75 MHz, ISM Band.				
	Transmitting power	0.5mW Max.				
	Hold time	5s//30s/90s/5min/20min/30min				
Sensor	Detection Sensitivity	100%/75%/50%/25%				
Parameters	Daylight Sensor	2Lux/10Lux/30Lux/50Lux/Disable				
	Detecting Radius	3-10m (mounting height 3-4m), 2-8m(mounting height 6m)				
	Mounting Height	6m Max.				
	Detecting Angle	150° (Wall mounted), 360° (Ceiling mounted)				
Operating	Operating Temperature	-25℃+60℃				
Environment	Storage Temperature	-40°C+80°C(Humidity: 10%-95% Non-condensing)				
	Safety standards	EN61058-1				
	EMC standards	EN300440; EN301489-1; EN55015; EN61547; EN61000-3-2; EN61000-3-3; EN62479				
Certificate Standards	Environmental Requirement	Compliant to RoHS				
3 6011 610	Certificate	CE, RED				

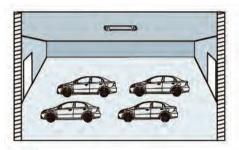
	Wiring	Press-in Type Terminals, wire diameter: 0.75-1.5mm²
	IP Rating	IP20
	Protection Class	Class II
Others	Installation	Built-in
Others	Dimension Package	77.5*34.5*22mm
		Bubble bag+Clapboard + Carton ( K=A )
	Net Weight	58±2g
	Lifetime	5 years warranty @Ta 230V full load

#### Note

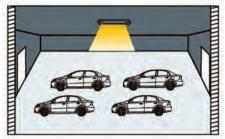
- 1. "N/A" means not available.
- 2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 170cm height person and walking speed is 0.3m/s.

#### 3. Function

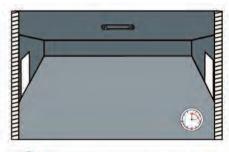
On/OFF Function



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

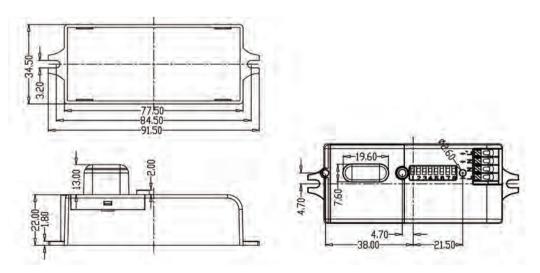


With insufficient ambient light, the sensor switches on the light when motion is detected.

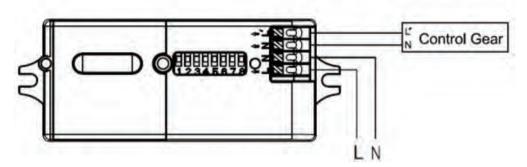


3 After elapse of hold time, the sensor switches off the light when no motion is detected.

## 4. Dimension (mm)

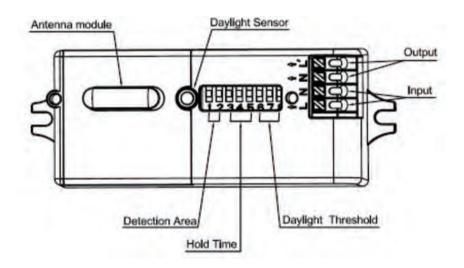


## 5. Wiring



 ${}^*\mathsf{The}$  sensor is designed for connect one load only. Connect more than one loads may damage the sensor.

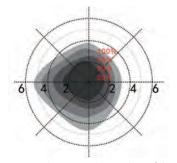
## 6. Structure



### 7. Radiation Pattern

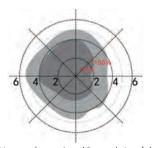
1) Ceiling mounting

Ceiling mounted height: 3m Sensitivity: 100%/75%/50%/25%

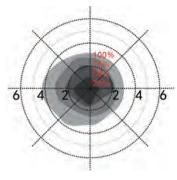


Normal moving (Speed:1m/s)

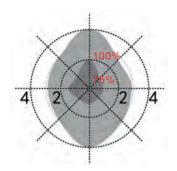
Ceiling mounted height: 6m(\*) Sensitivity:100%/75%



Normal moving (Speed:1m/s)



Slow moving (Speed: 0.3m/s)

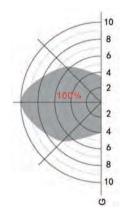


Slow moving (Speed: 0.3m/s)

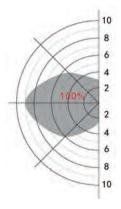
\*Only 100%/75% detection sensitivity is workable when installed at 6m mounting height. 25%/50% sensitivity is not able to detect motion signal.

#### 2) Wall mounting

Horizon mounted height: 2m Sensitivity: 100%



Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)

## 8. DIP Switch Setting

Detection Area (Sensitivity)

	1	2
100%	ON	ON
75%	-	ON
50%	ON	-
25%	-	-

**Hold Time** 

	3	4	5	
I	ON	ON	ON	5S
п	-	ON	ON	30\$
Ш	ON	-	ON	90\$
IV	-	-	ON	5min
V	ON	ON	-	20min
VI	-	-	-	30min

Daylight Threshold

	6	7	8	
I	ON	ON	ON	2Lux
п	ON	ON	-	10Lux
Ш	-	ON	-	30Lux
IV	ON	-	-	50Lux
V	-	-	-	Disable*

 $<sup>*</sup>Disable"\ means\ the\ daylight\ sensor\ not\ work.\ it\ will\ turn\ on\ light\ once\ motion\ is\ detected\ regardless\ of\ ambient\ light\ .$ 

#### 9. Override Function

Quick switch ON/OFF 3 times within 2sec to override sensor function. Lights will switch on all the time. Power off and on again to recover sensor function.

### 10. Initialization

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.

### 11. Factory Setting

Detection area: 100%, Hold Time: 5S, Daylight Sensor: Disable

### 12. Application Notice

- 1) The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switch.
- 2) The sensor which installed in the plastic and glass lampshade will reduce the sensitivity. For every 3mm increase in thickness, the sensitivity will be reduced by 20%.
- 3) The light sensitivity threshold is in a sunny environment, no shadow and ambient light diffuse reflection. Ambient lux level will be different in different environment, weather, climate, time-of-day and season.
- 4) The parameters of the sensor may need to be reconfigured in different installation environments.
- 5) This sensor is for indoor use only. It will affect the waterproof effect for outdoor use. Wind, rain, and moving objects around will cause false triggering.
- 6) The distance between any inductive sensors should be greater than 3m.
- 7) Do not place the sensor close to high-density objects such as metal, glass, concrete walls, etc, false triggering
- could happen. When the sensor is installed in a metal lamp, metal reflective surface, or a narrow enclosed environment, the microwave will be reflected repeatedly and cause false triggering. Please reduce the sensitivity or contact the manufacturer for technical support.
- 8) Please ensure that there are no moving signals around the sensor, such as fan, DC motor, sewer pipe, air outlet, etc., the sensor may generate false trigger.
- 9) You are advised to test 5 samples before mass application of sensor in a new lighting project.
- 10) Due to continuous improvement, the contents of this instruction could be changed without prior notice.
- 11) If the sensor is built under metal board ,make sure the sensor surface should to be seamless close to the metal plate without space .

