

About Merrytek Microwave

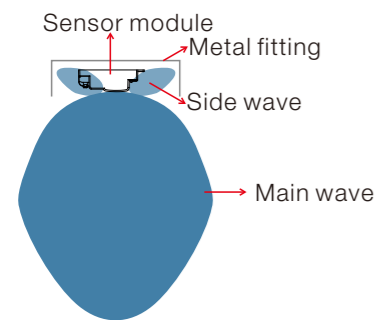


Sensor Principle

The high-tech sensor works on the principle of the Doppler effect. The sensor emits a signal at a 5.8GHz high frequency and receives its echo. If a movement in the detection zone changes the echo pattern, the sensor responds and switches the light on. In addition, due to the built-in daylight sensor, it can also read the lights level. The sensor will not switch on the light if there is sufficient natural light.

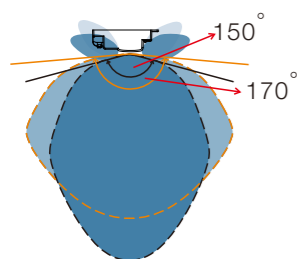
Microwave Motion Sensor

Merrytek microwave motion sensors are active motion detectors for luminaires. Besides the automatic ON-OFF control, Merrytek offers a wide range of microwave motion sensors with more energy-saving functions, such as 2-step dimming, 3-step dimming and RF communicating. Users can select the exact solution for numerous lighting applications.



Microwave detection includes two parts called main wave and side wave. Main wave normally detects the motion signal. Side wave does not effect motion detection but might disturb main wave if the microwave motion sensor is built-in a sealed metal luminaire as microwave can not pass through metal.

When the microwave module is built into a metal lighting luminaire or installed in a sensor near a wall, the side wave will be reflected by the metal base or the wall. It can disturb the main wave. As the result of this, the microwave motion sensor might not perform optimally. Reducing the detection sensitivity or the side wave will help to solve such problems.



In order to make the sensor detection more stable, Merrytek's default microwave module detecting angle is 150°, so the detection area is normally a 6-8m radius. If the customer requires a larger detecting angle, it can be customized to 170°. In the mean time, the mounting height will be shorter and it may cause unexpected detecting on the ceiling.

Application



Corridor

Stairwell

Warehouse

Car Park

 Office/
Meeting room

Merrytek Microwave Motion Detecting Features



Normal motion detecting

The sensor only detects a greater range of movement, such as walk.



Minor motion detecting

The sensor can detect minor movements, such as typing on a keyboard or taking notes.


 Zero-crossing
point operation

Helps protect the sensor against in-rush current when switching on/off.



Weather resistant

Normally, winding, breezing and raining can trigger microwave motion sensors. Merrytek use the latest 4th generation microwave detection technology for outdoor sensors to avoid interference from the elements.


 Identifying of artificial LED
light and natural light

Merrytek's patented daylight detecting sensor is able to identify and distinguish between artificial light and natural light. It can be installed in a LED luminaire and achieve daylight harvesting for increased energy savings easily.



Dry-contact

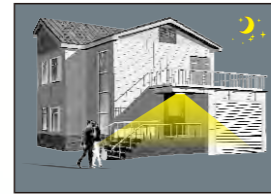
Dry contact sometimes is known as "Potentio-Free" or "Volt-Free". It opens or closes contact without any current or voltage.



ON/OFF function



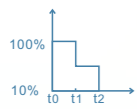
1 With sufficient ambient light, the light will not be switched on.



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.

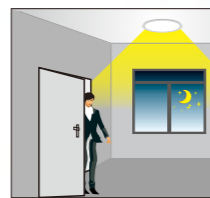


Step dimming

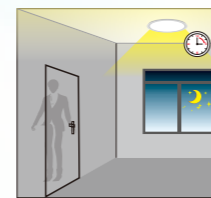
3-step dimming function



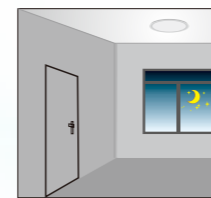
1 With sufficient ambient light, the light will not be switched on.



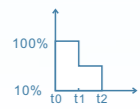
2 With insufficient ambient light, the sensor switches on the light when motion is detected.



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

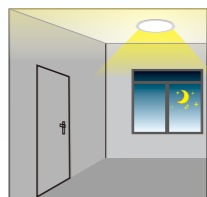


4 After elapse of stand-by period, the sensor switches off the light if no motion is detected in the detection zone.

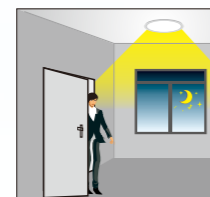


Step dimming

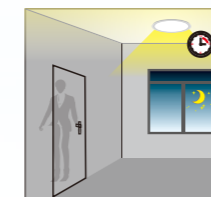
2-step dimming function



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.



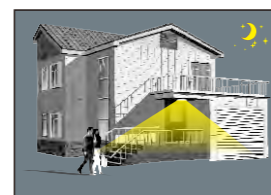
3 After elapse of hold time, the sensor dims the light at the present low light level if no motion is detected.

Daylight Learning

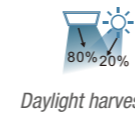
Due to different light transmittance, sometimes the daylight sensor can not detect the real value of the ambient light, so the sensor can switch on the light even if the real ambient light value is much higher than the present daylight threshold. With daylight priority function, daylight sensor can detect the real ambient light value and avoid mis-operation, switching on/off light according to the natural light value (outside the lighting fixture).



Daylight Learning



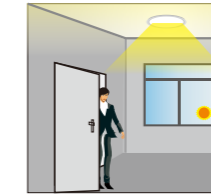
It defines a brightness level which only allows the light to illuminate according to the defined ambient brightness threshold.



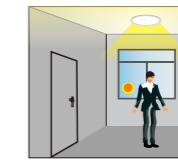
Daylight harvesting



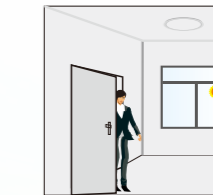
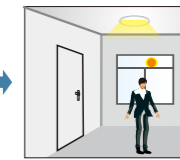
1 When the ambient light is greater than the present illumination level, the light will not be switched on.



2 When the ambient light level is below the present illumination level, the light will be switched on.



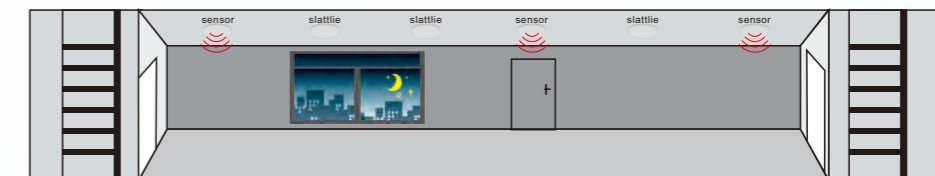
3 The light dims to maintain the present illumination level against the natural ambient light.



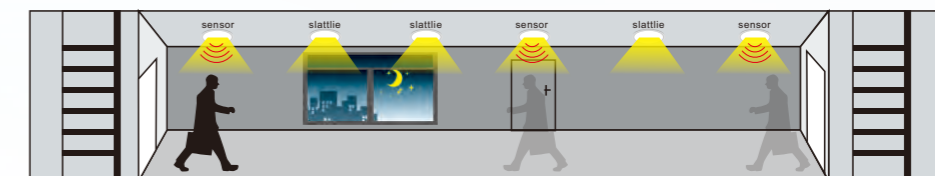
4 When there is sufficient ambient light, the light will be switched off even if there is motion detected.



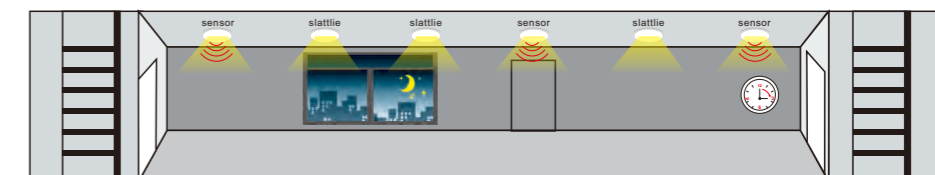
SYNC Master-slattie control



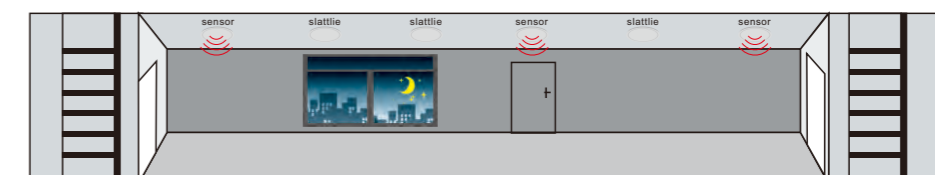
1 If no motion is detected, all lamps will be switched off.



2 If any movement is detected from any direction, all lamps will be synchronously switched on.



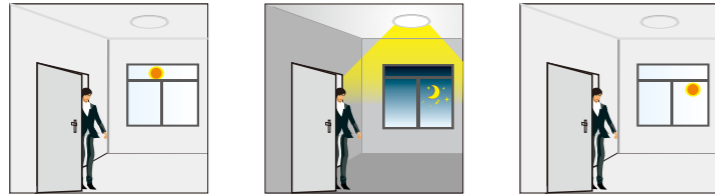
3 If no motion is detected in the detection zone, all lamps will be synchronously dimmed to a low light level after hold time.



4 After stand-by period, the lamps will be switched off if no movement is detected in the detection zone.



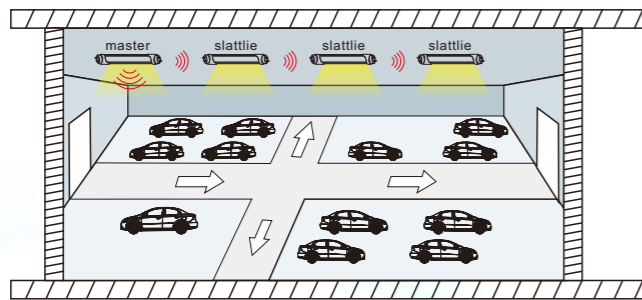
Daylight threshold



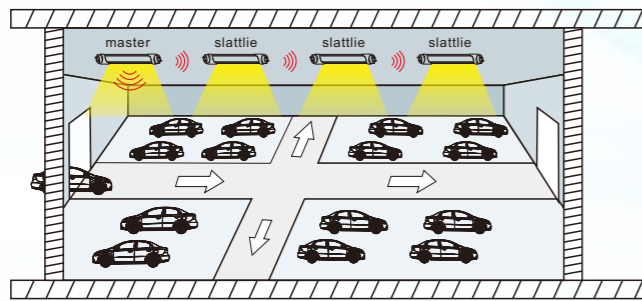
- 1 When the ambient light is larger than the present illumination level, the light will not be switched on.
- 2 When the ambient light is below the present illumination level, the light will be switched on.
- 3 When there is sufficient ambient light, the light will be switched off even if there is motion detected.



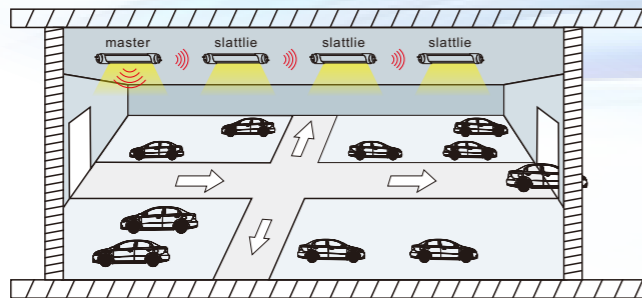
RF wireless networking



- 1 The lamps remain at a low light level when no motion is detected.



- 2 If any motion is detected from any direction, the lamps will be switched on to 100% brightness.



- 3 After hold time, the lamps will be dimmed to a low light level when no movement is detected.

How to select sensors for our luminaires?

	ON-OFF	Step dimming	Daylight priority	Daylight harvesting	Master-slattie
 Ceiling light Wall light	MC030S MC030S E MC008S E MC018S MC015S/D MC602S MC603S	MLC16C-P E MLC18C-P3 MLC28C-PE MC002D6 MC011D/A MLC20C-P2 MLC12C-P2D	MS02		MLC18C-PRF MLC18C-PRF2
 High bay & low bay	MC046S MC602S MC054V RC MC052V RF	MC031V MC054V RC MC609V RC MC049V		MS01	MC052V RF + MW04
 LED Panel light	MC040S MC034S MC025S MSA001 MSA002 MSA003	MLC40C-T		MLC40C-T1 MLC40C-PA	MLC40C-T MLC40C-T1
 Linear & batten	MC015S/D MC045S MC055S MC032S MC060S MC060S RC MC602S MC610V RC MC611V RC MC612V D RC MC613V D RC MC054V RC MC052V RF	MC031V MC054V RC MC049V MC003V MC003V2 MC003V/C MC003V/D MC601V MC605V D MC610V RC MC611V RC MC612V D RC MC613V D RC MLC40C-P4 MLC40C-P5 MLC65C-P3 MLC65C-P4 MLC65C-P5		MS01	MC052V RF + MW04
 Flood light	MC055S MC042S MC032S	MC042P	MC042P		
 Down light	MC040S MC034S MSA001 MSA002 MSA003				

Where can we use microwave motion detecting?



A ON-OFF function
 • Corridor, stairwell, restrooms or courtyard
 Recommended models:
 MC030S E, MC040S, MC015S/D,
 MC025S, MC040S, MC603S

B Daylight harvesting
 • Office, meeting room or classroom
 Recommended models:
 MS01, MC034S, MLC40C-T,
 MLC40C-T1

D 2-step dimming

Car Park, gas station

Recommended models:
MC003V2, MC049V,
MC052V RF + MW04, MC601V,
MC031V, MC054V RC

A ON-OFF function

**Corridor, stairwell, restrooms,
courtyard or doorway**

Recommended models:
MC042S, MC032S, MC055S, Ms02

B ON-OFF function

**Corridor, stairwell, restrooms,
courtyard or doorway**

Recommended models:
MC030S E, MC040S, MC015S/D,
MC025S, MC040S, MC603S

D 2-step dimming

Car Park, gas station

Recommended models:
MC003V2, MC049V,
MC052V RF + MW04, MC601V,
MC031V, MC054V RC

E Step dimming

Warehouse

Recommended models:
■ 6-12m mounting height:
MC003V2, MC049V, MC052V RF + MW04,
MC031V, MC054V RC
■ 6-15m mounting height:
MC054V RC, MC031V

C Daylight harvesting, Step dimming

Office, meeting room or classroom

Recommended models:
MS01, MC034S, MLC40C-T,
MLC40C-T1



ON/OFF Function

Model No.	Page	Operating Voltage	Normal motion detecting	Minor motion detecting	Remote control	Daylight threshold	Weather resistant	Rated Load	Dimension(LxWxH)	Detection Area (Radius)	Max. Mounting height	Hold Time	Stand-by Period	Stand-by DIM Level	Daylight Sensor	Operation Temp	IP Rating	Certification
MC030S/MC030S E Smart version	P14	220~240Vac	Y			Y		400W(Inductive) 800W(Resistive)	65x35.5x25.5mm	6m	6m	5s/30s/90s/3min/ 20min/30min	N/A	N/A	2lux/10lux/25lux/ 50lux/disable	-25℃ ~ 60℃	IP20	TUV, CE
MC008S E Economical version	P15	220~240Vac	Y			Y		400W(fluorescent 5E3) 800W (incandescent 2E4)	82x36.5x25.5mm	6m	6m	5s/30s/90s/3min/ 20min/30min	N/A	N/A	5lux/10lux/30lux/ 50lux/disable	-25℃ ~ 60℃	IP20	TUV, CE
MC046S Enhanced version	P16	220~240Vac	Y			Y		400W(Inductive) 800W(Resistive)	87x43x29mm	8m	12m	5s/30s/90s/3min/ 20min/30min	N/A	N/A	5lux/15lux/30lux/50lux/ 100lux/150lux/Disable	-35℃ ~ 70℃	IP20	CE
MC015S/D Detachable sensor	P17	220~240Vac	Y			Y		200W(Inductive) 400W(Resistive)	53x26x16mm(Sensor) 60x36.5x26mm(Power supply)	4m	6m	5s/30s/90s/3min/ 20min/30min	N/A	N/A	5lux/15lux/50lux/disable	-35℃ ~ 70℃	IP20	CE
MC045S Slim sensor	P18	220~240Vac	Y			Y		400W(Inductive) 800W(Resistive)	120x32x23mm	4m	6m	5s/30s/90s/3min/ 20min/30min	N/A	N/A	2lux/10lux/25lux/50lux/ disable	-35℃ ~ 70℃	IP20	CE
MC060S Slim sensor	P19	220~240Vac	Y			Y		250W(Inductive) 400W(Resistive)	162x21x28mm	4m	6m	5s/30s/90s/3min/ 20min/30min	N/A	N/A	2lux/10lux/25lux/50lux/ disable	-35℃ ~ 70℃	IP20	CE
MC060S RC Slim sensor	P19	220~240Vac	Y		Y,MH03	Y		250W(Inductive) 400W(Resistive)	162x21x28mm	4m	6m	5s/30s/90s/3min/ 20min/30min	N/A	N/A	2lux/10lux/25lux/50lux/ disable	-35℃ ~ 70℃	IP20	CE
MC055S Flood light sensor	P20	220~240Vac	Y			Y	Y	400W(Inductive) 800W(Resistive)	83X60X53mm	6m	3m(wall mounting) 6m(ceiling mounting)	5s/30s/90s/3min/ 30min	N/A	N/A	2lux/10lux/25lux/50lux/ disable	-25℃ ~ 55℃	IP65	CE
MC032S Flood light sensor	P21	220~240Vac	Y			Y	Y	400W(Inductive) 800W(Resistive)	Φ 72x34mm	6m	3m(wall mounting) 6m(ceiling mounting)	5s/30s/90s/3min/ 20min/30min	N/A	N/A	2lux/10lux/25lux/50lux/ disable	-25℃ ~ 55℃	IP65	CE
MC042S Flood light sensor	P22	220~240Vac	Y			Y	Y	Max.load: 200W	115x35x41mm	10m(wall mounting) 6m(ceiling mounting)	3m(wall mounting) 6m(ceiling mounting)	5s/90s/3min/20min	N/A	N/A	25lux/Disable	-25℃ ~ 55℃	IP65	CE
MC018S Standard version	P23	220~240Vac	Y			Y		400W(fluorescent) 1200W (incandescent)	82x44x22mm	6m	6m	10s/30s/90s/3min/ 20min/30min	N/A	N/A	5lux/15lux/30lux/50lux/ disable	-35℃ ~ 70℃	IP20	CE
MC025S Detachable sensor	P24	220~240Vac	Y	Y		Y		400W(Inductive) 800W(Resistive)	49.5x49.5x11mm(Antenna) 88x37x27.7mm(Power supply)	4m	6m	10s/3min//5min/ 10min/15min/30min	N/A	N/A	5lux/10lux/30lux/50lux/ disable	-35℃ ~ 70℃	IP20	CE

Dimming Function

Model No.	Page	Operating Voltage	Normal motion detecting	Master-slattlie control	Remote control	RF networking	Daylight threshold	Daylight priority	Daylight learning	Weather resistant	Rated Load	Dimension(LxWxH)	Detection Area (Radius)	Max. Mounting height	Hold Time	Stand-by Period	Stand-by DIM Level	Daylight Sensor	Operation Temp	IP Rating	Certification
MC031V (EU version)	P27	220-240Vac	Y				Y				800W (Inductive) 1200W(Resistive)	Φ 72x59mm	8m	15m	Sensor: 5s/30s/90s/ 3min/20min/30min	Sensor: 5s/5min/10min/ 30min/60min/+∞	10%/20%/ 30%/50%	50lux/100lux/ 200lux/disable	-35℃ ~ 55℃	IP65	CE/SAA
MC054V RC (EU version)	P29	220-240Vac	Y		Y, (MH01)		Y	Y			800W (Inductive) 1200W(Resistive)	Φ 72x59mm	8m	15m	Sensor:5s/30s/1min/ 3min/20min/30min Remote control: 5s/30s/ 1min/3min/5min/10min/ 20min/30min	Sensor:0s/1min/3min/ 10min/30min/+∞ Remote control: 0s/ 10s/1min/3min/5min/ 10min/30min/+∞	10%/20%/ 30%/50%	5lux/15lux/ 30lux/50lux/100lux/ 150lux/Disable	-35℃ ~ 55℃	IP65	CE
MC049V Enhanced detection zone	P30	220-240Vac	Y	Y			Y				800W (Inductive) 1200W(Resistive)	93.5x45x 28.5mm	8m	12m	5s/30s/90s/3min/ 20min/+∞	0s/5s/5min/10min/ 30min/1h/+∞	10%/20%/30%/ 50%	2lux/5lux/10lux/ 25lux /50lux/100lux/ Disable	-35℃ ~ 70℃	IP20	CE
MC003V Standard version	P31	220-240Vac	Y				Y				800W (Inductive) 1200W(Resistive)	92x52x25.5mm	6m	8m	5s/30s/90s/3min/ 20min/30min	5s/5min/10min/ 30min/1h/disable	10%/20%/30%/ 40%/50%	5lux/10lux/30lux/ 50lux/disable	-35℃ ~ 70℃	IP20	CE
MC003V2 Economical version	P32	220-240Vac	Y				Y				200W(Inductive)	92x52x25.5mm	4m	6m	5s/30s/90s/3min/ 20min/30min	5s/5min/10min/ 30min/1h/disable	10%/20%/30%/ 40%/50%	5lux/10lux/30lux/ 50lux/disable	-25℃ ~ 60℃	IP20	CE
MC003V/C Clustered-control	P33	220-240Vac	Y	Y			Y				800W (Inductive) 1200W(Resistive)	92x52x25.5mm	6m	8m	5s/30s/90s/3min/ 20min/30min	5s/5min/10min/ 30min/1h/disable	10%/20%/30%/ 40%/50%	5lux/10lux/30lux/ 50lux/disable	-35℃ ~ 70℃	IP20	CE
MC003V/D Detachable sensor	P34	220-240Vac	Y				Y				400W (Inductive) 800W(Resistive)	45x26.1x16mm(Sensor) 88x52x25.5mm (Power supply)	4m	6m	10s/30s/90s/3min/ 20min/30min	5s/5min/10min/ 30min/1h/+∞	10%/20%/30%/ 40%/50%	5lux/10lux/30lux/ 50lux/disable	-35℃ ~ 70℃	IP20	CE
MC052V RF RF Wireless Networking	P35	220-240Vac	Y	Y		Y	Y				400W (Inductive) 800W(Resistive)	115x35x41mm	8m	15m	5s/30s/90s/3min/ 20min/30min/+∞	0s/5s/5min/10min/ 30min/60min/+∞	10%/20%/30%/ 50%	5lux/15lux/30lux/ 50lux/100lux/150lux/ Disable	-35℃ ~ 70℃	IP20	CE
MW04 RF receiver	P35	220-240Vac		Y		Y					400W (Inductive) 800W(Resistive)	75x38x34mm	N/A	N/A	0s/5s/5min/10min/ 30min/60min	N/A	5%/10%/20%/ 30%	N/A	-35℃ ~ 70℃	IP20	CE
MC042P For COB flood light	P37	220-240Vac	Y				Y	Y		Y	100W	115x35x25.5mm	10m(wall mounting) 6m(ceiling mounting)	3m(wall mounting) 6m(ceiling mounting)	5s/60s/3min/5min	N/A	15% or 30% fixed by factory	25lux/50lux/ disable	-35℃ ~ 55℃	IP65	CE

DC Operation

(Additional Pages-Overview of Product Specification)

Model No.	Page	Operating Voltage	Normal motion detecting	Daylight threshold	Rated Load	Dimension(LxWxH)	Detection Area (Radius)	Max. Mounting height	Hold Time	Stand-by Period	Stand-by DIM Level	Daylight Sensor	Operation Temp	IP Rating	Certification
MC016D Dry-contact	P39	12Vdc	Y	Y	N/A	90x52x25.5mm	6m	6m	10s/30s/90s/3min/20min/30min	N/A	N/A	5lux/10lux/30lux/50lux/Disable	-35°C ~70°C	IP20	CE
MC002D6	P40	12VDC+/-2V	Y	Y	12Vdc	53x26x16mm	4m	4m	5s/30s/90s/3min	0s/90s/3min/+∞	20%	5lux/15lux/50lux/Disable	-25°C ~60°C	IP20	CE
MC011D/A	P41	25~100Vdc	Y	Y	50W-200W	45x26.1x16mm(Sensor) 92x52x25.5mm(Power supply)	4m	6m	10s/90s/3min/10min	0s/5min/10min/30min/60min/Disable	10%/20%/30%/40%/50%/60%/70%/80%	10lux/30lux/50lux/Disable	-35°C ~70°C	IP20	CE
MC011D6	P42	12-24Vdc	Y	Y	120W LED	53x26x16mm(Sensor) 60x36.5x26mm(Power supply)	4m	6m	5s/30s/90s/3min/20min/Always on	N/A	0%/10%/20%/50%	30lux/Disable	-25°C ~60°C	IP20	CE

Stand-alone Sensor

Model No.	Page	Operating Voltage	Normal motion detecting	Minor motion detecting	Daylight threshold	Rated Load	Dimension(LxWxH)	Detection Area(Radius)	Max. Mounting height	Hold Time	Daylight Sensor	Operation Temp	IP Rating	Certification
MC040S	P44	220~240Vac	Y		Y	400W(inductive) 800W(resistive)	Φ 95x55mm Cut size: Φ 80	4m	6m	5s/30s/90s/3min/20min/30min	5lux/15lux/30lux/50lux/100lux/150lux/Disable	-25°C ~55°C	IP20	CE
MC034S	P45	220~240Vac	Y	Y	Y	200W(inductive) 400W(resistive)	Φ 95x55mm Cut size: Φ 80	4m	6m	Ch1:5s/90s/3min/10min Ch2:5s/5min/10min/20min	5lux/15lux/50lux/Disable	-25°C ~55°C	IP20	CE
MSA001	P46	220~240Vac	Y		Y	400W(inductive) 800W(resistive)	Φ 76x40mm Cut size: Φ 65	6m	8m	5s/30s/90s/3min/20min/30min	2lux/10lux/25lux/50lux/Disable	-25°C ~55°C	IP20	CE
MSA002	P47	220~240Vac	Y		Y	400W(inductive) 800W(resistive)	86x86x40mm	6m	8m	5s/30s/90s/3min/20min/30min	2lux/10lux/25lux/50lux/Disable	-25°C ~55°C	IP20	CE
MSA003	P48	220~240Vac	Y		Y	400W(inductive) 800W(resistive)	86x86x40mm	6m	8m	5s/30s/90s/3min/20min/30min	2lux/10lux/25lux/50lux/Disable	-25°C ~55°C	IP20	CE

Sensor for North America

Model No.	Page	Operating Voltage	Normal motion detecting	Master-slattlie control	Remote control	Daylight threshold	Daylight harvesting	Daylight priority	Daylight learning	Rated Load	Dimension(LxWxH)	Detection Area (Radius)	Max. Mounting height	Hold Time	Stand-by Period	Stand-by DIM Level	Daylight Sensor	Operation Temp	IP Rating	Certification
MC602S	P65	120/277Vac	Y			Y				200W@120Vac 400W@277Vac (ballast) 400W@120Vac 800W@277Vac(resistive)	84x43x29mm	8m	12m	5s/30s/90s/3min/20min/30min	N/A	N/A	5lux/15lux/30lux/50lux/100lux/Disable	-35°C ~70°C	IP20	cULus
MC603S	P66	120/277Vac	Y			Y				200W@120Vac 400W@277Vac-ballast 400W@120Vac 800W@277Vac-resistive	62x42x25mm	6m	6m	5s/30s/90s/3min/20min/30min	N/A	N/A	2lux/10lux/25lux/50lux/Disable	-25°C ~60°C	IP20	cULus
MC601V	P71	120/277Vac	Y	Y		Y				400W@120Vac 1000W@277Vac-ballast 800W@120Vac 1000W@277Vac-resistive	93.5x45x28.5mm	8m	12m	5s/30s/90s/3min/20min/∞	0s/5s/5min/10min/30min/1h/Disable	10%/20%/30%/50%	2lux/5lux/10lux/25lux/50lux/100lux/Disable	-35°C ~70°C	IP20	cULus/FCC
MC031V	P67	120/277Vac	Y			Y				120Vac: 4A Electronic/magnetic ballast 277Vac: 3A Electronic/magnetic ballast	Φ 72x59mm	8m	15m	5s/30s/90s/3min/20min/30min	5s/5min/10min/30min/60min/+∞	10%/20%/30%/50%	50lux/100lux/200lux/Disable	-35°C ~55°C	IP65	cULus/ cETLus/FCC
MC054V RC For high bay light	P69	120/277Vac	Y		Y, (MH01)	Y			Y	120Vac: 4A Electronic/magnetic ballast 277Vac: 3A Electronic/magnetic ballast	Φ 72x59mm	8m	15m	Sensor:5s/30s/1min/3min/20min/30min Remote control: 5s/30s/1min/3min/5min/10min/20min/30min	Sensor:0s/1min/3min/10min/30min/∞ Remote control: 0s/10s/1min/3min/5min/10min/30min/+∞	Sensor:10%/20%/30%/50%	Sensor:5lux/15lux/30lux/50lux/100lux/150lux/Disable	-35°C ~55°C	IP20	cULus
MC605V D	P70	120/277Vac	Y			Y				120Vac: 4A Electronic/magnetic ballast 277Vac: 3A Electronic/magnetic ballast	43X20X13mm (Sensor) 95x42.5x24.5mm (Power supply)	4m	10m	5s/30s/90s/3min/20min/+∞	0s/5s/5min/10min/30min/1h/∞	10%/20%/30%/50%	5lux/15lux/30lux/50lux/100lux/150lux/Disable	-35°C ~70°C	IP20	cULus (pending)
MC609V RC For high bay light	P72	347/480Vac	Y		Y, (MH02)	Y			Y	347Vac: 3A Electronic/magnetic ballast 480Vac: 3A Electronic/magnetic ballast	Φ 72x59mm	8m	15m	Sensor:5s/30s/1min/3min/20min/30min Remote control: 5s/30s/1min/3min/5min/10min/20min/30min	Sensor:0s/1min/3min/10min/30min/Disable Remote control: 0s/10s/1min/3min/5min/10min/30min/Disable	10%/20%/30%/50%	5lux/15lux/30lux/50lux/100lux/150lux/Disable	-35°C ~55°C	IP65	cULus (pending)
MC610V RC For tri-proof light	P73	120/277Vac	Y		Y, (MH02)	Y	Y		Y	120Vac: 4A Electronic/magnetic ballast 277Vac: 3A Electronic/magnetic ballast	86x86x42mm	8m	15m	Sensor: 5s/30s/1min/3min/20min/30min Remote control: 5s/30s/1min/3min/5min/10min/20min/30min	Sensor: 0s/1min/3min/10min/30min/Disable Remote control: 0s/10s/1min/3min/5min/10min/30min/Disable	10%/20%/30%/50%	5lux/15lux/30lux/50lux/100lux/150lux/Disable	-35°C ~55°C	IP20	cULus (pending)
MC611V RC For tri-proof light	P73	347/480Vac	Y		Y, (MH02)	Y	Y		Y	347Vac: 3A Electronic/magnetic ballast 480Vac: 3A Electronic/magnetic ballast	86x86x42mm	8m	15m	Sensor:5s/30s/1min/3min/20min/30min Remote control: 5s/30s/1min/3min/5min/10min/20min/30min	Sensor:0s/1min/3min/10min/30min/Disable Remote control: 0s/10s/1min/3min/5min/10min/30min/Disable	10%/20%/30%/50%	5lux/15lux/30lux/50lux/100lux/150lux/Disable	-35°C ~55°C	IP20	cULus (pending)
MC612V D RC Detachable sensor	P74	120/277Vac	Y		Y, (MH02)	Y		Y	Y	120Vac: 4A Electronic/magnetic ballast 277Vac: 3A Electronic/magnetic ballast	48x20x13.5mm (Sensor) 87x45x26mm (Power supply)	4m	6m	Sensor: 5s/30s/1min/5min/10min/15min/30min Remote control: 5s/30s/1min/10min/15min/30min	Sensor: 0s/1min/3min/5min/10min/+∞ Remote control:0s/1min/3min/5min/10min/30min/+∞	10%/20%/30%/50%	5lux/15lux/30lux/50lux/100lux/150lux/Disable	-35°C ~70°C	IP20	cULus (pending)
MC613V D RC Detachable sensor	P75	347/480Vac	Y		Y, (MH02)	Y		Y	Y	347Vac: 3A Electronic/magnetic ballast 480Vac: 3A Electronic/magnetic ballast	48x20x13.5mm (Sensor) 128x44x27.4mm (Power supply)	4m	6m	Sensor: 5s/30s/1min/5min/10min/15min/30min Remote control: 5s/30s/1min/10min/15min/30min	Sensor: 0s/1min/3min/5min/10min/+∞ Remote control:0s/1min/3min/5min/10min/30min/+∞	10%/20%/30%/50%	5lux/15lux/30lux/50lux/100lux/150lux/Disable	-35°C ~70°C	IP20	cULus (pending)

Sensor DIM LED Driver

Model No.	Page	Operating Voltage	Normal motion detecting	Master-slave control	RF networking	Daylight threshold	Daylight harvesting	Daylight priority	Output	Dimension (LxWxH)	ON-OFF	Dimming	Wireless Control	Detection Area (Radius)	Max. Mounting height	Daylight Sensor	Hold Time	Stand-by Period	Stand-by DIM Level	Operation Temp	IP Rating	Certification
MLC40C-PA For office light	P57	220~240Vac				Y	Y		700mA/750mA/800mA/850mA/ 900mA/950mA/1000mA/ 1050mA (30-40Vdc)	202x58x30mm				N/A	N/A	Target level: 100lux/150lux/ 200lux /250lux/300lux/ 350lux/400lux/450lux	N/A	N/A	N/A	-25℃ ~45℃	IP20	CE
MLC40C-T For office light	P59	220~240Vac	Y	Y		Y			30-42Vdc; 700mA/750mA/800mA/850mA/ 900mA/950mA/1050m	202x58x30mm	Y	Y		6m	4m	150lux/300lux/Disable	0s/10min/30min/+∞	5s/3min/15min/+∞	10%/25%	-25℃ ~50℃	IP20	CE
MLC40C-T1 For office light	P61	220~240Vac	Y	Y		Y	Y		30-42Vdc; 700mA/750mA/800mA/850mA/ 900mA/950mA/1050m	202x58x30mm	Y	Y		6m	4m	Target level: 150lux/ 300lux /Disable	0s/10min/30min/+∞	5s/3min/15min/+∞	10%/25%	-25℃ ~50℃	IP20	CE
MLC16C-PE	P50	220~240Vac	Y			Y			28-52V/300mA	Φ68x28.5mm	Y	Y		4m	6m	5lux/ 15lux/ 50lux/ Disable	5s/90s/3min/10min	0s/30s/10min/ +∞	10%/25%	-25℃ ~50℃	IP20	TUV
MLC18C-P3	P50	220~240Vac	Y			Y			28-52V/350mA	Φ68x28.5mm	Y	Y		4m	6m	5lux/ 15lux/ 50lux/ Disable	5s/90s/3min/10min	0s/30s/10min/ +∞	10%/25%	-25℃ ~50℃	IP20	TUV
MLC28C-PE	P50	220~240Vac	Y			Y			22~40Vdc; 450mA/550mA/600mA/700mA	Φ82x28.5mm	Y	Y		4m	6m	5lux/ 15lux/ 50lux/ Disable	5s/90s/3min/10min	0s/30s/10min/ +∞	10%/25%	-25℃ ~45℃	IP20	TUV
MLC40C-P4	P52	220~240Vac	Y			Y			950mA 30-42V dc	Power supply: 171x35x28.5mm sensor module: 39x20x13mm	Y	Y		6m	10m	5lux/15lux/30lux/ disable	5s/90s/3min/10min	0s/30s/10min/+∞	10%/25%	-25℃ ~50℃	IP20	CE
MLC40C-P5	P52	220~240Vac	Y			Y			30-50V dc; 400mA/500mA/600mA/700mA	Power supply: 171x35x28.5mm sensor module: 45x20x13mm	Y	Y		6m	10m	10lux/30lux/50lux/ 100lux/Disable	5s/90s/5min/25min	1min/5min/25min/+∞	0%/10%/ 25%/50%	-20℃ ~50℃	IP20	CE
MLC18C-PRF RF wireless control	P55	220~240Vac	Y	Y	Y	Y		Y	300mA(16~61.2V) 350mA(16~54.4V) 450mA(16~40.8V) 600mA(16~27.2V) 700mA(16~27.2V)	102x95x26mm	Y	Y	Y	6m	6m	2lux/10lux/35lux/ 50lux/100lux/disable	5s/30s/90s/3min/ 20min/30min	0s/5min/10min/ 30min/1h/+∞	10%/20%/ 30%/50%	-25℃ ~50℃	IP20	CE
MLC18C-PRF2 RF wireless control	P55	220~240Vac	Y	Y	Y	Y		Y	300mA(16~61.2V) 350mA(16~54.4V) 450mA(16~40.8V) 600mA(16~27.2V) 700mA(16~27.2V)	102x95x26mm	Y	Y	Y	6m	6m	2lux/10lux/35lux/ 50lux/100lux/disable	5s/30s/90s/3min/ 20min/30min	0s/5min/10min/ 30min/1h/+∞	10%/20%/ 30%/50%	-25℃ ~50℃	IP20	CE
MLC20C-P2 Detachable sensor	P51	220~240Vac	Y			Y			28-42Vdc,300mA/320mA/ 350mA/380mA/400mA/450mA	Power supply: 122x35x20 sensor module: 39x20x13mm	Y	Y		6m	10m	5lux/15lux/30lux/disable	5s/90s/3min/10min	0s/30s/10min/+∞	10%/25%	-25℃ ~50℃	IP20	CE
MLC65C-P3 Detachable sensor	P53	220~240Vac	Y			Y			1500mA, 30-42V	Power supply: 212x42x30 sensor module: 45x20.2x13mm	Y	Y		6m	6m	5lux/15lux/ 30lux/Disable	5s/90s/3min/10min	0s/30s/10min/+∞	10%/25%	-25℃ ~50℃	IP20	CE
MLC65C-P5 Detachable sensor	P53	220~240Vac	Y			Y			1400mA, 30-42V	Power supply: 206x30x30mm sensor module: 53x20.2x13mm	Y	Y		6m	6m	5lux/15lux/ 30lux/Disable	5s/90s/3min/10min	0s/30s/10min/+∞	10%/25%	-25℃ ~50℃	IP20	CE
MLC65C-P4 Detachable sensor	P53	220~240Vac	Y			Y			35-55Vdc, 600mA/ 925mA/1050mA/1200mA	Power supply: 206x30x30mm sensor module: 53x20.2x13mm	Y	Y		6m	6m	10lux/30lux/50lux/ 100lux/Disable	5s/90s/5min/25min	1min/5min/ 25min/+∞	0%/10%/ 25%/50%	-25℃ ~50℃	IP20	CE
MLC12C-P2D	P54	220~240Vac	Y			Y			30-42Vdc, 270mA	88x67x26mm	Y	Y		6m	6m	5lux/15lux/50lux/disable	5s/90s/3min/10min	0s/30s/10min/+∞	20%/30%	-25℃ ~50℃	IP20	CE