

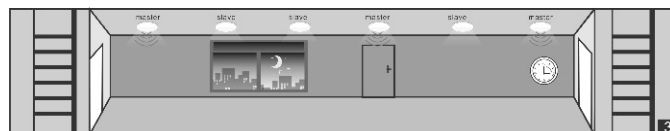
- MLC18C-PRF Integrate MW motion sensor, dimmable led driver and wireless transceiver technology, to control a group of lamps wirelessly without extra drivers.
- MW sensor comply with 5.8GHz ISM band, motion can be detected through plastic, glass and thin non-metal materials. Detection area, hold time, dimming leve, stand-by period and daylight threshold are adjustable by dip switches.
- Night-light sensor function will be triggered when dimming level reach to 10%, when ambient brightless is over preset close lux level, sensor will switch off lamp, if less than preset open lux level, lamp will be switched on automatically.
- Output current 300mA/350mA/450mA/600mA/700mA selectable by dip switches.
- MLC18C-PRF apply advanced 868MHz Radio Frequency, integrate code check technology, more stable and reliable with full digital receiving and transmitting messages, up to 16 groups can be created by fixed code technology, make sure no missing of signal during receiving and transmitting.

Optional Function

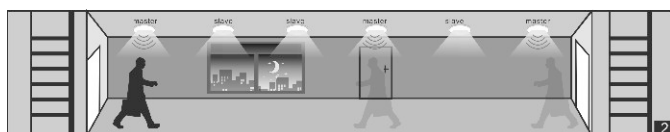
Master-Slave Control



- 1 When no motion is detected, all lamps switch off.



- 2 With insufficient ambient light, if any motion is detected in exit or entrance, all lamps switch on at the same time.



- 3 After hold time, all lamps dim to a low light level if no new motion trigger.



- 4 After stand-by period, the lamps switch off if no movement detected in the detection zone.

Night/Light Function



- Lamp turns on at low light level in the night.



- Motion detected, lamp automatically lights up to 100%.



- After hold time, the lamp gradually dims to a low light level if no movement detected.



- Lamp turns off after dawn.

General Guidelines for Installation



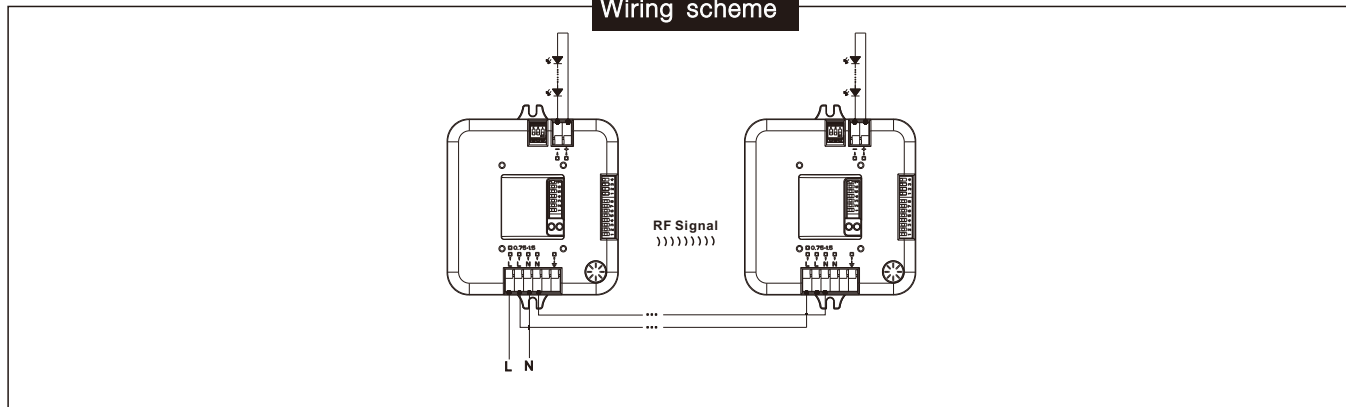
- 1, The driver should be installed by a qualified electrician. And ensure that the electricity supply is switched off before installing or servicing the product.
- 2, The driver should not be modified in any way. Any modifications made to this product will immediately invalidate any warranties issued.
- 3, The company does not accept responsibility for any consequences resulting from unauthorized modification of the product.
- 4, The driver should be connected to a stable power supply of 220/240Vac 50Hz.
- 5, Microwaves cannot pass through metal or brick walls if thicker than 20cm. They will pass through thinner walls but there will be some attenuation.
- 6, Installation inside a glass or plastic housing will result in a reduction of detection sensitivity. Expect a reduction of approximately 20% for every 3mm of thickness.

RF grouping

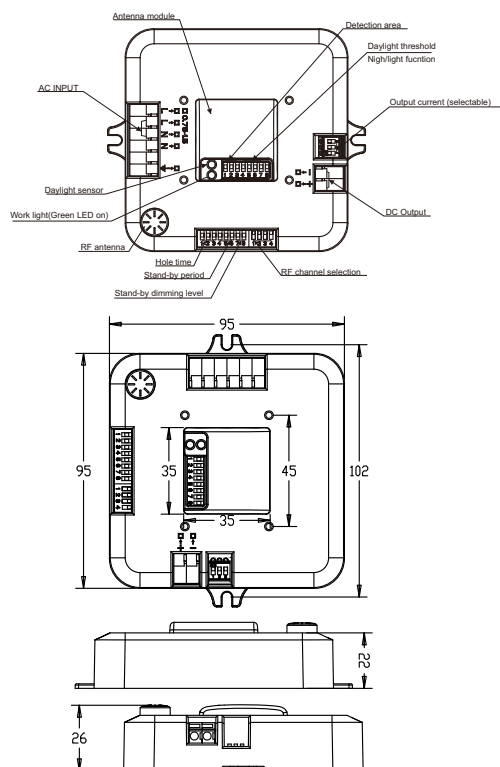
MLC18C-PRF supply 4pcs DIP switches for RF grouping, set exact same configuration in each driver the can communicate with each other.



Wiring scheme



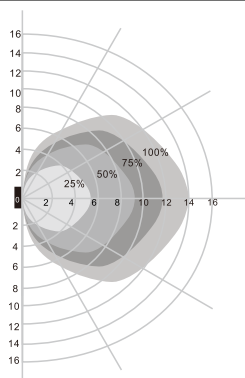
Specifications



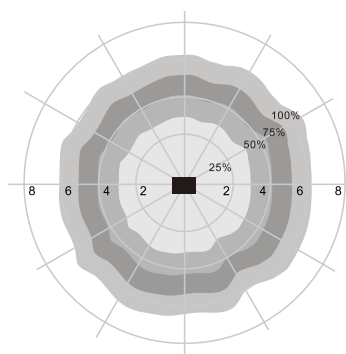
MLC18C-PRF

Operating voltage	220-240VAC 50Hz/60Hz
Output constant current	300mA(16-61.2V), 350mA(16-54.4V), 450mA(16-40.8V) 600mA(16-27.2V), 700mA(16-27.2V) set by 3 dip switches
Output voltage	85VDC Max.
Efficiency	≥83%
Power factor	≥0.9
HF system	5.8 GHz ±75 MHz, ISM band
Transmitting power	<0.5mW
Detection zone	Max.(D x H): 12m x 8m
Detection sensitivity	10% / 25% / 50% / 75% / 100%
Hold time	5s/30s/90s/3min/20min/30min
Stand-by period	0S / 5min / 10min / 30min / 1H / +∞
Daylight threshold	2 lux / 10 lux / 35 lux / 50 lux / 100 lux / Disable
Stand-by dimming level	10% / 20% / 30% / 50%
Transmission distance	Max. 50m in the free field Max. 30m inside buildings
Mounting height	3-4m(typical) 8m Max.
Motion detection	0.5-3m/s
Detection angle	150°(wall installation) 360°(ceiling installation)
Working temperature(Ta.)	-35℃ ~50℃
IP rating	IP20

Detection Pattern



Wall mounting pattern (Unit: m)



Ceiling mounting pattern (Unit: m)

Settings

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

	1	2	3	
ON	ON	ON	ON	100%
	-	ON	ON	75%
	ON	-	ON	50%
	-	-	ON	25%
	-	-	-	10%

Detection area

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

	4	5	6	7	8	
ON	ON	ON	ON	ON	ON	Disable
	-	ON	ON	ON	ON	100lux
	ON	-	ON	ON	ON	50lux
	-	-	ON	ON	ON	35lux
	-	-	-	ON	ON	10lux
	-	-	-	-	ON	2lux

Daylight threshold*

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 light level.

100lux, 50lux, 35lux: twilight operation, 10lux, 2lux: darkness operation only.

Note that daylight sensor is active only when lamp totally switches off.

	4	5	6	7	8	open	close
ON	ON	ON	ON	ON	-	100lux	250lux
	-	ON	ON	ON	-	50lux	200lux
	ON	-	ON	ON	-	35lux	150lux
	-	-	ON	ON	-	10lux	100lux
	-	-	-	ON	-	2lux	50lux

Night light sensor function*

When ambient brightness is over close lux level, load will be switched off automatically even if motion detected; When ambient brightness is below open lux level, load will be switched on even if no motion detected.

*Daylight threshold and Night/light function is set via the same 4 dip switches, and can not operate simultaneously.

	1	2	3	
ON	ON	ON	ON	5S
	-	ON	ON	30S
	ON	-	ON	90S
	-	-	ON	3min
	ON	ON	-	20min
	-	-	-	30min

Hold time

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

	4	5	6	
ON	ON	ON	ON	0S
	-	ON	ON	5min
	ON	-	ON	10min
	-	-	ON	30min
	ON	ON	-	1H
	-	-	-	+∞

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.

	7	8	
ON	ON	ON	10%
	-	ON	20%
	ON	-	30%
	-	-	50%

Stand-by dimming level

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

FAQ

Question	Cause	Remedy
The LED will not illuminate.	Incorrect daylight sensor setting selected	Adjust setting
	LED has failed	Replace load
	Power is switched off	Switch on
The load is permanently illuminated.	Continuous movement in the detection area	Check detection area setting.
	The LED light (containing sensor) is installed in an area too close to reflective surfaces, i.e. metal, glass or concrete walls.	1, Make sure installation area suitable with at least 30cm space between light and surrounding reflective surfaces. 2, Reduce sensitivity (detection area).
The LED light will not illuminate despite movement.	Speed of moving object is not in the range of 0.5-3m/s or the detection radius is too small.	Check detection area setting.
RF grouping is not workable.	Distance between master and slave lights is large than 30m.	Short installation distance between LED lights.
	Settings of RF grouping is incorrect.	Make sure the same RF grouping dip switch setting between master and slaves.