

MLC18C-PRF RF Wireless Version Sensor DIM LED Driver



Introduction

- Integrated LED driver, microwave motion sensor, daylight sensor and RF module, applicable to wireless net working of luminaires.
- RF wireless networking, up to 16 different groups.
- Night/light function, automatically switch on at dusk and turn off at dawn.
- Multi-output current from 300mA to 700mA.

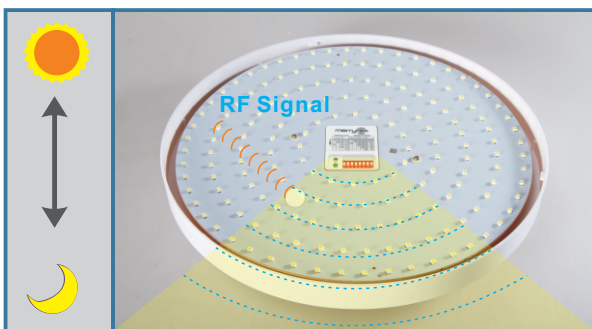
MLC18C-PRF Integrates MW motion sensor, dimmable led driver and wireless transceiver technology, to control a group of lamps wirelessly without extra drivers.

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 level, 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 brightness 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.



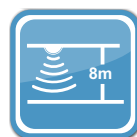
Max.6M



Light Sensor



Hold Time
5s~30min



Mounting Height
8m Max.



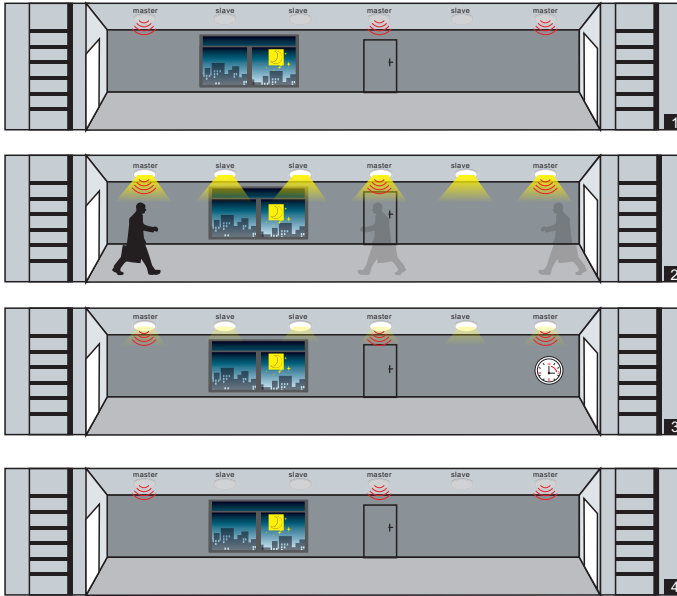
Wireless Networking,
Free of Wire.



5 Years
Guarantee

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



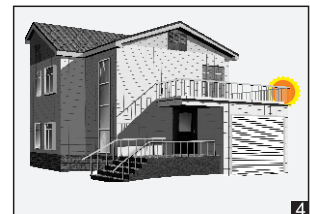
Lamp turns on at low light level in the night.



Motion detected, lamp automatically lights up to 100%.

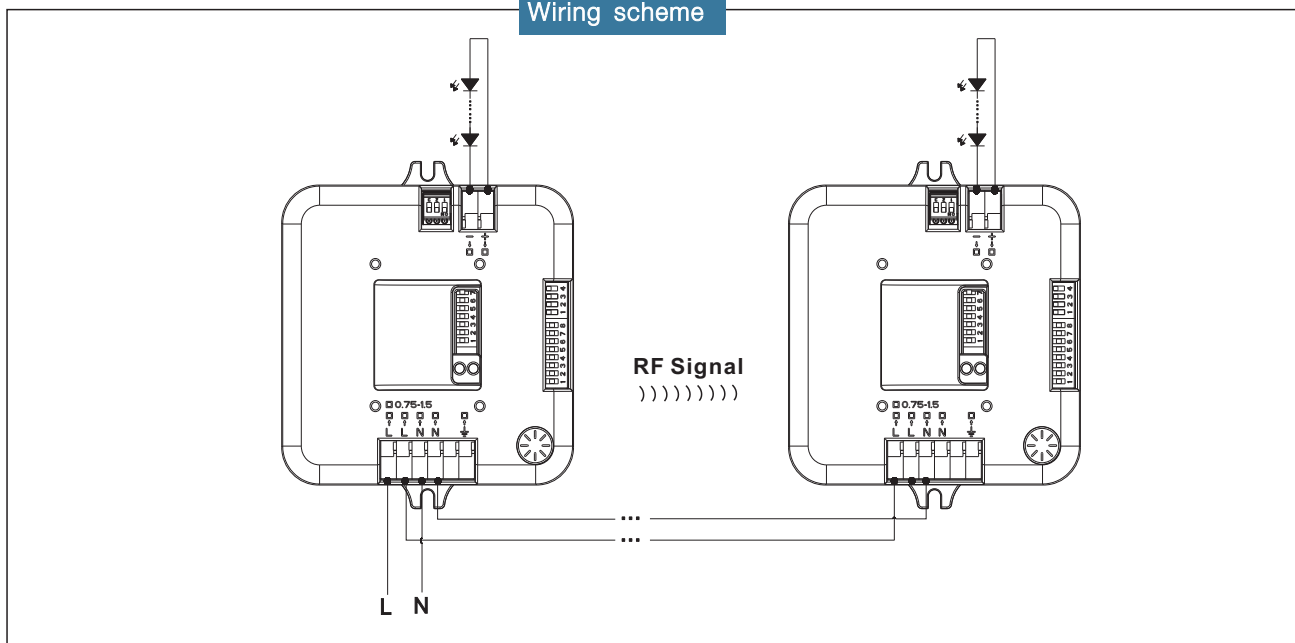


After hold time, the lamp gradually dims to a low light level if no movement detected.

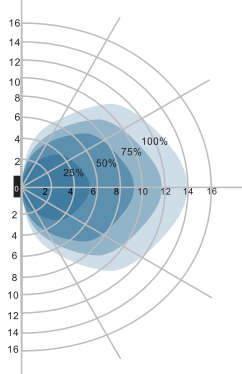


Lamp turns off after dawn.

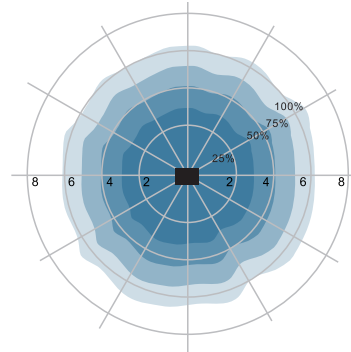
Wiring scheme



Detection Pattern



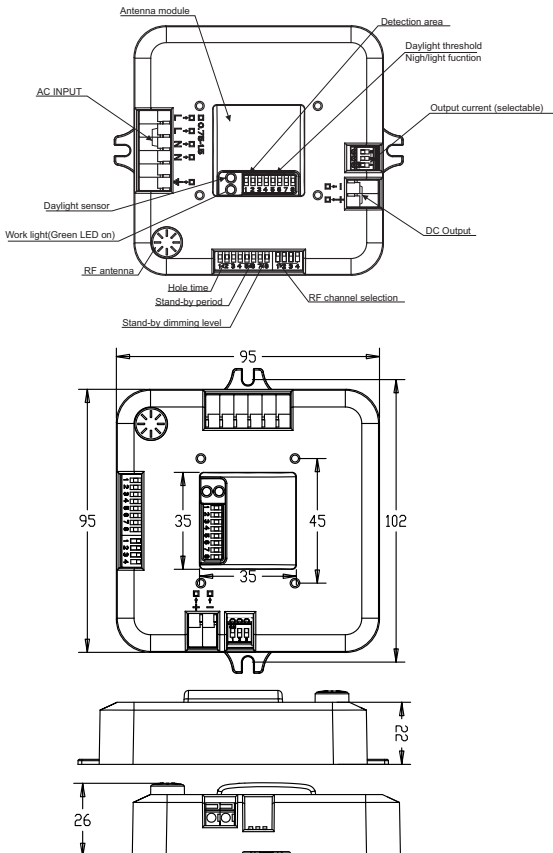
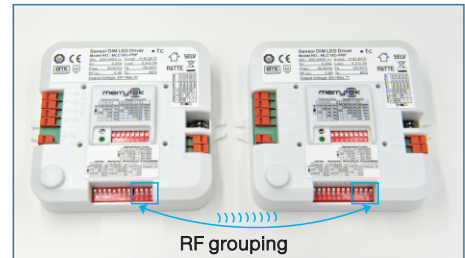
Wall mounting pattern (Unit: m)



Ceiling mounting pattern (Unit: m)

RF grouping

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



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	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°C ~50°C
IP rating	IP20

Setting

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%

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	150lux
	ON	-	ON	ON	-	35lux	100lux
	-	-	ON	ON	-	10lux	50lux
	-	-	-	ON	-	2lux	30lux

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 Disable mode, 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.