

MC046S ON-OFF Function / Enhanced Detection Zone



Introduction

- Automatic switching based on motion and light level.
- Zero-crossing point operation helps protect the sensor against in-rush current.
- Super Compact size makes it suitable to fix within most luminaires.
- 4-pole press-in terminal (L, N, N, L'), easy assembly.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.
- Wide detection area, range up to 20m in diameter.
- Support higher mounting height 15m Max.

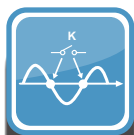
MC046S is an innovative and active motion detector with HF system 5.8GHz. Motion can be detected through plastic, glass and thin non-metal materials.

The sensor supplies a simple energy-saving solution to use light only when and where you need it. It automatically switches on/off light based on motion and ambient light level. Can control all kinds of lamps, for example, halogen, fluorescent and LED lights. Compact size and small casing, suitable to fix within most luminaires. 4-pole press-in terminal (L, N, N, L'), very easy to install.

As it uses the third generation Merrytek technology, normal 5.8GHz microwave module can easily reach high mounting high up to 12m and long detection area 8-9m in radius.



Max.10M



Zero-crossing
point operation



Light Sensor



Hold Time
5s~30min



Mounting Height
15m Max.



Automatic
On/Off



5 Years
Guarantee

ON -OFF Function

Motion sensor MC046S + LED driver or ballast (Any brand)

MC046S is an innovative motion sensor, switch on the light on detection of movement, and switch off after a hold time when there is no motion detected. As built-in daylight sensor can read brightness value, the sensor does not switch on the light if with sufficient natural light.



With sufficient light, the lamp doesn't switch on.

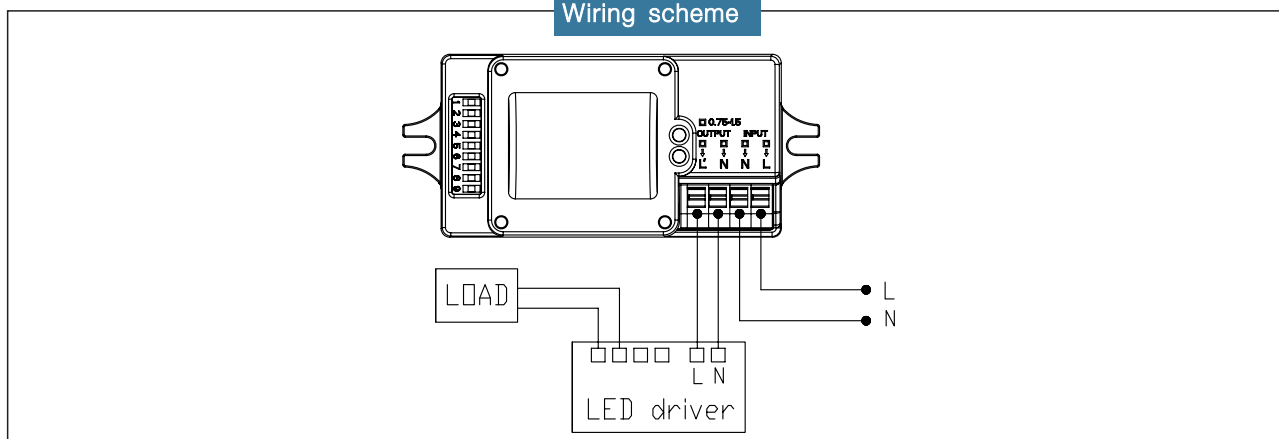


With insufficient ambient light, the sensor switches on the lamp when motion is detected.

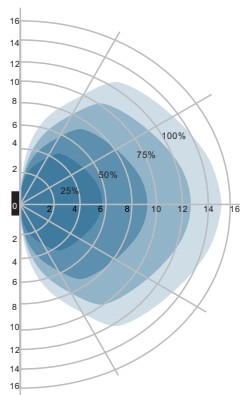


After hold time, the sensor switches off the lamp when no motion is detected.

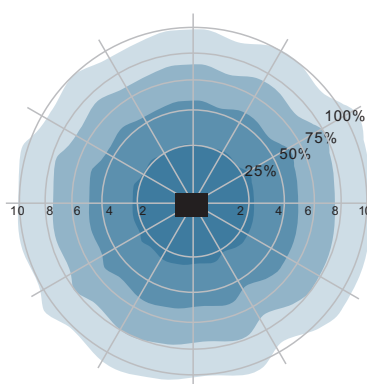
Wiring scheme



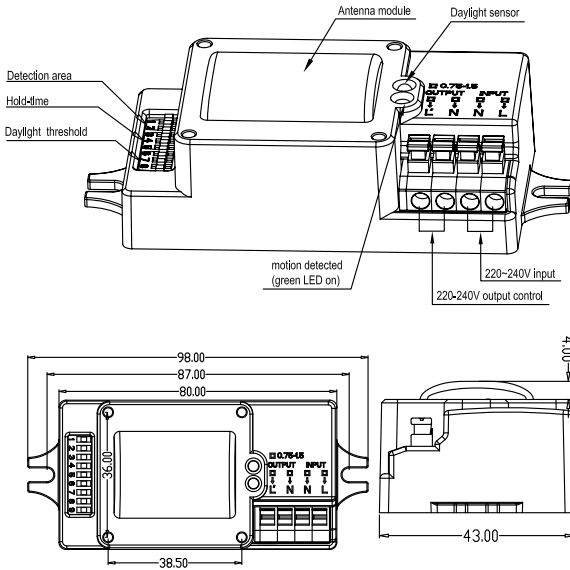
Detection Pattern



Wall mounting pattern (Unit: m)



Ceiling mounting pattern (Unit: m)



MC046S	
Operating voltage	220~240Vac, 50Hz
Rated load	400W(inductive), 800W (resistive)
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW
Power consumption	≤0.5W(standby)
Detection zone	Max.(D x H): 20m x 15m
Detection sensitivity	25% / 50% / 75% / 100%
Hold time	5s / 30s / 90s / 3min / 20min / 30min
Daylight sensor	5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable
Mounting height	15m Max.
Motion detection	0.5~3m/s
Detection angle	150°(wall installation) 360°(ceiling installation)
Operating temperature	-20℃ ~60℃
IP rating	IP20

Setting

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

	1	2	
ON ↑	I ON ON	100%	
	II - ON	75%	
	III ON -	50%	
	IV - -	25%	

Detection area

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

	3	4	5	
ON ↑	I ON ON ON	5s		
	II - ON ON	30s		
	III ON - ON	90s		
	IV - - ON	3min		
	V ON ON -	20min		
	VI - - -	30min		

Hold time

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

	6	7	8	9	
ON ↑	I ON ON ON ON	5lux			
	II - ON ON ON	15lux			
	III ON - ON ON	30lux			
	IV - - ON ON	50lux			
	V ON ON - ON	100lux			
	VI ON ON ON -	150lux			
	VII - - - -	Disable			

Daylight sensor

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.

30lux, 50lux, 100lux, 150lux: twilight operation, 5lux, 15lux: darkness operation only.