

Part No. MOS Integral Microwave Sensor On/Off



Introduction

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MOS 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.

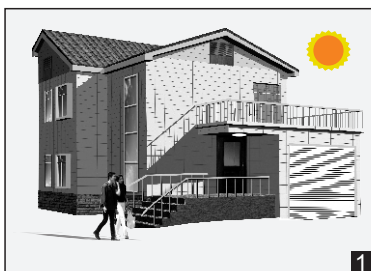
Features:

- 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.

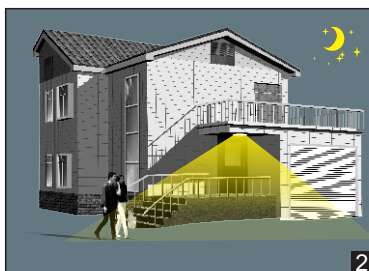
ON -OFF Configuration

On/Off Configuration

MOS 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.

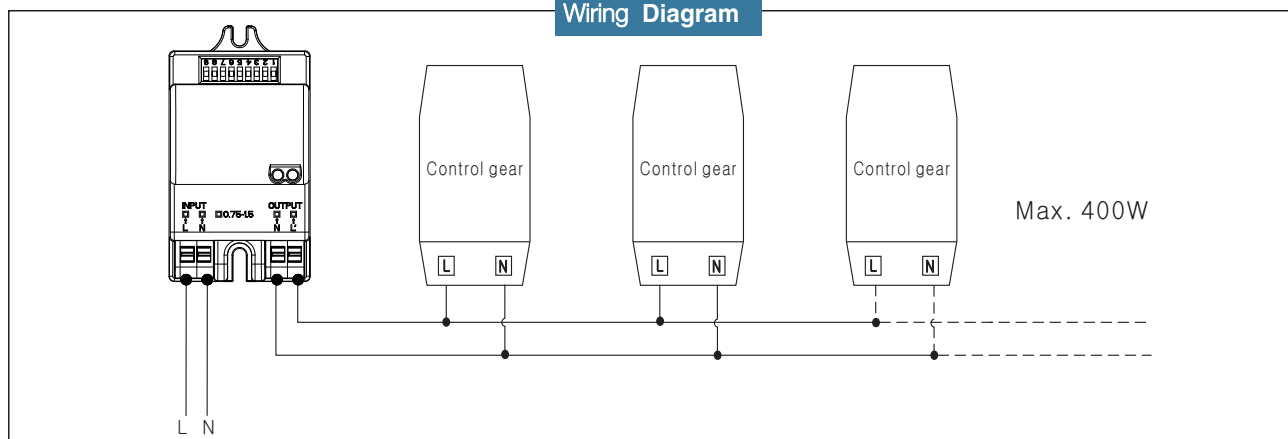


With insufficient ambient light, the sensor switches on the lamp when motion is detected.

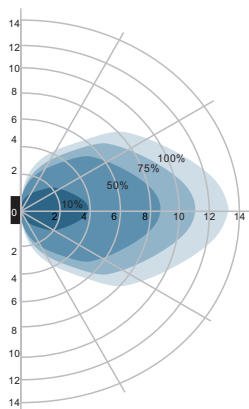


After hold time, the sensor switches off the lamp when no motion is detected.

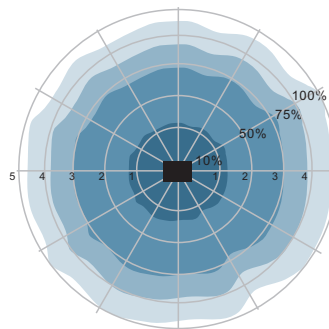
Wiring Diagram



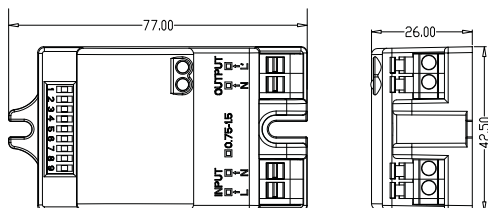
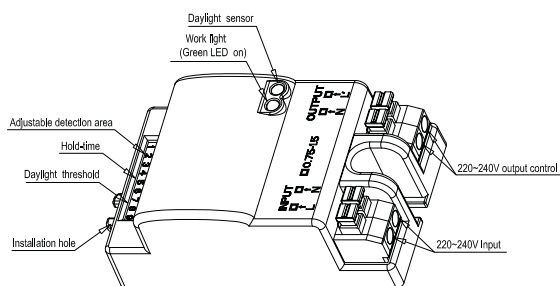
Detection Pattern



Wall mounting pattern (Unit: m)
Suggested installation height: 1.5m



Ceiling mounting pattern (Unit: m)
Suggested installation height: 3m



MOS Mechanical Specification

Operating voltage	120~277Vac, 50Hz
Rated load	400W@220V-277VAC 200W@120VAC(inductive) ; 800W@220V-277VAC 400W@ 120VAC(resistive)
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW
Power consumption	≤0.5W(standby)
Detection zone	Max.(D x H): 10m x 6m
Detection sensitivity	10% / 50% / 75% / 100%
Hold time	5s / 30s / 90s / 3min / 20min / 30min
Daylight sensor	2lux / 10lux / 25lux / 50lux / Disable
Mounting height	6m Max.
Motion detection	0.5~3m/s
Detection angle	150°(wall installation) 360°(ceiling installation)
Operating temperature	-20℃ ~60℃
IP rating	IP20

Sensor Settings

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

	1	2	
ON	I	ON	100%
	II	—	75%
	III	ON	50%
	IV	—	10%

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	5s
	II	—	ON	30s
	III	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	
ON	I	ON	ON	2lux
	II	ON	—	10lux
	III	—	ON	25lux
	IV	ON	—	50lux
	V	—	—	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.
50lux, 25lux: twilight operation, 10lux, 2lux: darkness operation only.

	9	
ON	I	ON
	II	—

Mode

When set to "Constant ON", the microwave sensor function is inactive, lights turns on or off by switch.

When set to Sensor, the microwave sensor function is active.