

### Part No. MOSB

## Integral Microwave Sensor Bi-Level



# Introduction

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The MOSB is innovative and active motion detectors with HF system 5.8GHz. Motion can be detected through plastic, glass and thin non-metal materials. The sensors allow energy saving without compromising comfort. When used in combination with 1-10V dimmable LED drivers or ballasts, they can achieve 3-step dimming function, which is perfect for use in some areas that requires a light change notice before totally switch off. Operates normal 5.8GHz microwave module can easily reach high mounting high up to 15m and long detection area 10m in radius.

Features:

- Automatic switching or dimming when used in combination with 1-10V dimmable LED drivers or ballasts.
- Built-in daylight sensor. 1-10V interface can match up with GlobaLux stand-alone daylight sensor MOSB and achieve daylight harvesting.
- Compact size makes it suitable to fix within most luminaires.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.
- Wide detection area, range up to 16m in diameter.
- Support higher mounting height 15m Max.
- Optional surface mounting and base mounting

# Dimming Configuration

### 3-step dimming function

Lamps in corridor are controlled by several sensors. Once any motion is detected by one of sensors, the motion signal will be transmitted to other sensors connected together. Then, all lamps switch on at the same time, instead of switching on the lamps in the area where motion is detected.



 No motion detected, all lamps switch off.







- Any movement is detected from any direction, all lamps synchronously switch on.
- No motion is detected in detection area, all lamps synchronously dim to a low light level after hold time.
- After stand-by period, the lamps switch off if no movement is detected in the detection zone.

## **ON - OFF Configuration**

### Motion sensor MOSB + LED driver or ballast (Any brand)

MOSB 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.



## Daylight Harvesting Configuration





Ambient light larger than preset illumination level (Set by 1-10V daylight sensor), the lamp keeps off.

Ambient light below than preset illumination level, the lamp switches on when motion is detected.

The lamp lights on 100% illumination or dims to maintain the preset illumination level against the level of ambient light.



With sufficient ambient light, the lamp turns off at once, even with motion trigger.



With insufficient ambient light, the lamp dims to stand-by

dimming level (Set in the motion sensor) when no motion detected ofter hold time, and then switches off after stand-by period.

# **Detection Pattern**





### Parameter Setting by DIP Switch:

The sensor have two switcher to setting the function, Detection range, Hold time, Stand-by period, Daylight sensor and stand-by dimmable level.



#### **Detection Range Setting(sensitivity):**

	1	2	
Ι	ON	ON	100%(6-7M) <b>*</b>
Π	ON		75%(5-6M)
Ш		ON	50%(3-4M)
IV			10%(1-2M)

#### **Hold Time Setting:**

	3	4	
Ι	ON	ON	5S
Π	ON		5mins \star
Ш		ON	15mins
IV			30mins

#### **Daylight sensor Setting:**

	5	6	
Ι	ON	ON	5lux
I	ON		30lux
Ш		ON	150lux
IV			Disable \star

### Stand-by period:

	7	8	9	
Ι	ON	ON	ON	Os
Π		ON	ON	5s
Ш	ON		ON	5mins
IV			ON	10mins
V	ON	ON		30mins
VI		ON		60mins
VII				+∞ *

### Stand-by dimmable level:

	10	
Ι	ON	50% <b>*</b>
П		20%

### \* for default setting

### INSTRUCTIONS

- 1. Fixing the microwave module on the upper cover with screws and nuts, and place the gasket between the module and the upper cover.
- 2. Remove the paper of double-sided tape and attach the control module to the bottom of fixture.
- 3. Connect the male and female terminal wires of the Microwave module and the microwave control circuit.







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