

**PROJECT** 

TYPE

DATE

ITEM NO.

NOTE

# LOW VOLTAGE MICROWAVE BI-LEVEL SENSOR

MMS-DC11 Series
Bi-level Microwave Sensor

#### **DESCRIPTION**

The MMS-DC11 is a motion sensor that dims lighting from high to low based on movement. This slim, low-profile sensor is designed for installation inside the bottom of a light fixture body. The sensors use microwave sensing technology that reacts to changes in movement within the coverage area. Once the sensor stops detecting movement and the time delay elapses lights will go from high to low mode and eventually to an OFF position if it is desired. Sensors must directly "see' motion of a person or moving object to detect them, so careful consideration must be given to sensor luminaire placement and lens selection. Avoid placing the sensor where obstructions may block the sensor's line of sight.





RC-100

#### **SPECIFICATION FEATURES**

#### Benefits

- Power input: 12-24VDC.
- Rated for wet and cold locations.
- Automatic dimming when used in combination with 0-10V dimmable LED drivers or ballasts.
- Built-in daylight sensor.
- Detection area, time delay and daylight threshold can be precisely set via remote control RC-100.
- Wide detection area, range up to 50 ft in diameter and mounting height 40 ft Max. Suitable for warehouse use.



Max. 8m



Mounting Height 12m Max.



Daylight Sensor



Hold Time 10S-60min



Automatic Dimming



5 Years Guarantee

### WARNING

NOTE: Warm up time is 15 seconds. After the sensor connects input power first time, the light will keep on 15 seconds, then go to dimming to work normally.

NOTE: Factory Default Setting: 100% sensitivity, Hold on time: 5min, Daylight sensor is disabled, Dimming level: 30%, Dimming time: 60minitues.

NOTE: Any setting changed by remote control, the led light that sensor connect will on/off as confirm.

#### **ORDERING INFORMATION**

## Available with the following Alphalite products:

WPA Series



WPS Series



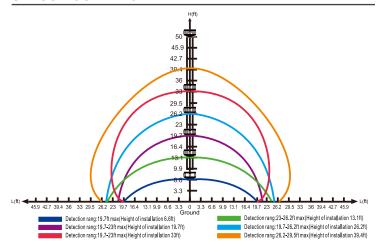


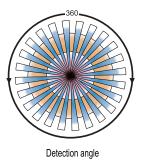
# **PERFORMANCE**

## **SUMMARY**

Power Supply	12-24V DC
HF System	5.8GHz+75MHz
Dim Control Output	0-10V, max. 25mA sinking current
Detection Radius/angle	Max 26ft.(8m)/360°
Mounting Height	Max 40ft.(12meters)
Remote Range	50ft.(15meters) indoor, no backlight
Humidity	Max. 95% RH
Temperature	-40°F - +158°F (-40°C~+70°C)

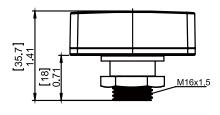
# **SENSOR COVERAGE**

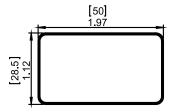




# **PHYSICAL PARAMETERS**

## **DIMENSION**





Once powering the device up, the MMS-DC11 will use factory default parameters to operate. If adjustments are needed, "RC-100" wireless IR configuration tool must be used.

## **UTILIZING FIELD AND INTRODUCTION**

MMS-DC11 is a moving object sensor that can detect range of 360 and it's working frequency is 5.8GHz. The advantage of this product is stable working state(stable working temperature:-40°C~+70°C), MMS-DC11 adopts a microwave sensor(high-frequency output <0.2mW). so that it is safe and performs better than infrared sensor.

#### **FUNCTION AND OPTIONS:**

If offers 3 levels of the light. Control: 100% dimming light(0,10%,30%,50%)--off; Periods of selectable waiting time: motion hold-time and 24 hours, selectable day light threshold, and freedom of detection area. If natural light lower Light-control setting(10Lux,30Lux,50Lux), the light will not automatically on (0,10%,30%,50%). When person enter in the room, the light will on 100%, after person left the room, the room enter in stand by level after hold on time.



With sufficient natural light, the light does not switch on when presence is detected



With insufficient natural light, the sensor switches on the light automatically when person enters the (options) standby level after the room. The lamp never switch off with presence, even the nature light is sufficient



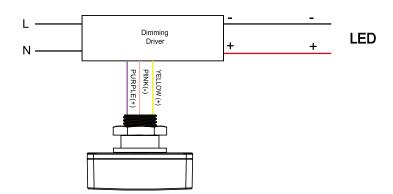
People left, light still dims to 0/10%/30%/50%(options) standby level after the hold time

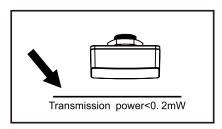


Light switches off automatically after the stand-by period elapses.

#### **WIRING DIAGRAMS**

MMS-DC11 wiring with dimming ballast or LED driver.





NOTE: The high-frequency output of this sensor is <0.2mW - that is just 1/5000 of the transmission power of a mobile phone or the output of a microwave.