



Specification

Product Name:

AC ON/OFF sensor

Model No.:

MC098S , MC098S 1

| Version | Date | Reasons | Publishing |
|---------|------------|---------|------------|
| V1.0 | 2024.03.05 | | James. Guo |
| | | | |
| | | | |

【Product Features】

- Low impedance microwave antenna, can effectively resist interference from 5G, WiFi, Bluetooth and other wireless signals.
- Adopting patented di-pole antenna, with strong environmental adaptability and no detection blind area.
- Products in batch production comply with RED certification, and the entire lamp certification is guaranteed.
- Dip switch design, users can easily set parameters according to needs
- Long strip shell design, suitable for tri-proof light and ceiling lamps
- Maximum installation height of 6 meters
- 5 years warranty

【Parameters】

| Input | | |
|----------------------------|---|--|
| Rated Voltage | 220-240Vac 50/60Hz | |
| Stand-by Power | ≤0.5W | |
| Surge Test | 1KV(L/N,EN61000-4-5) | |
| Output | | |
| Output Signal | ON/OFF | |
| Type of Load | Inductive or Resistive | |
| Load Capacity | 400W@230Vac(Inductive) ; 800W@230Vac(Resistive) | |
| Max. Surge Capacity | 7A relay 50A(50% Ipeak, twidth =200uS, 230Vac full load, cold start); | |
| Sensor Parameters | | |
| Working Frequency | 5.8 GHz ±75MHz, ISM wave band | |
| Transmitting Power | 1mW Max. | |
| Detection Area(Radius) | Ceiling mounting height 3m: r≥4m@0.3m/s, r≥2.5m@1m/s; Wall mounting height 3m: r≥5m@0.3m/s, r≥4m@1m/s Test condition: Set 100% sensitivity, open 60 m² indoor area. | |
| Mounting Height | 3m (6m Max) | |
| Hold time | 5s/30s/90s/5min/20min/30min (Dial code) | |
| Detection Area | 100%/75%/50%/25%(Dial code) | |
| Daylight Sensor | Normal Daylight | 2Lux/10Lux/30Lux//50Lux/Disable(Dial code) |
| Operating Temperature | -25℃...+60℃ | |
| Storage Temperature | -40~80℃ Humidity: ≤85% non-condensing | |
| Certificate Standards | | |
| Certified | CE, RED | |
| Environmental Requirements | Comply with RoHS 2.0 Reach | |
| IP Rating | IP20 | |
| Other | | |
| Remote Model | MH10; MH16; MH03 | |
| Wiring | Press-in Type Terminals, wire diameter: 0.5-0.75mm² | |
| Installation | Built-in | |
| Package | Bubble bag+Clapboard + Carton(K=A) | |

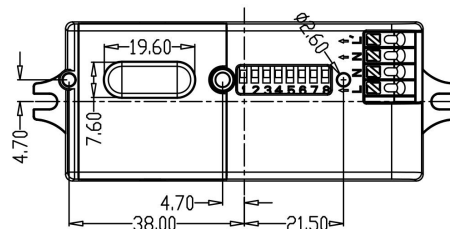
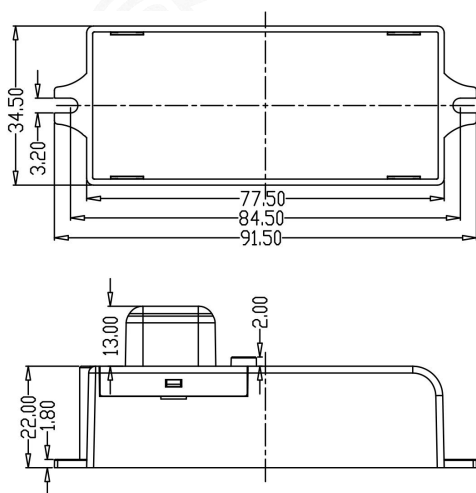
| | |
|------------|---------------------|
| Net Weight | 38 ±2g |
| Lifetime | 5 years warranty@Ta |

【Function】

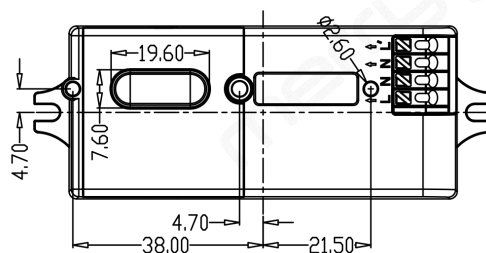
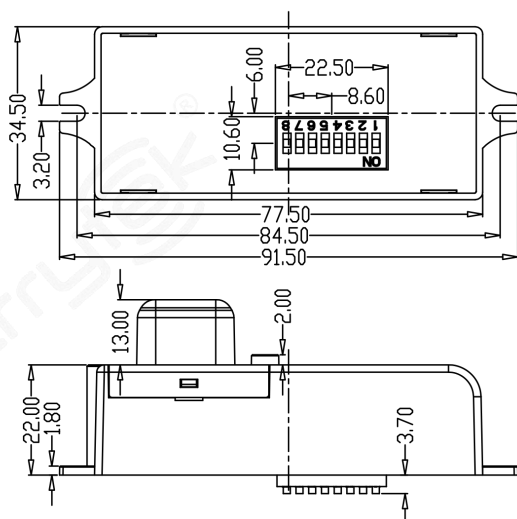
| | |
|--|---|
| <input checked="" type="checkbox"/> ON/OFF function | Light control Disable or external brightness value is lower than the set value. When the microwave sensors detects the movement of an object, the sensor triggers and enters the light-on state. It maintains the light-on state after a delay and then enters the light-off state. |
| <input type="checkbox"/> Two-step dimming function | N/A |
| <input type="checkbox"/> Three-step dimming function | N/A |
| <input type="checkbox"/> Daylight harvesting | N/A |
| <input type="checkbox"/> Daylight priority | N/A |

【Product Information】

- Dimension(units: mm)



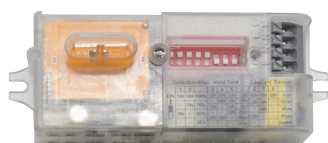
MC098S



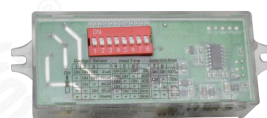
MC098S 1

● Function & Wiring

Product Picture

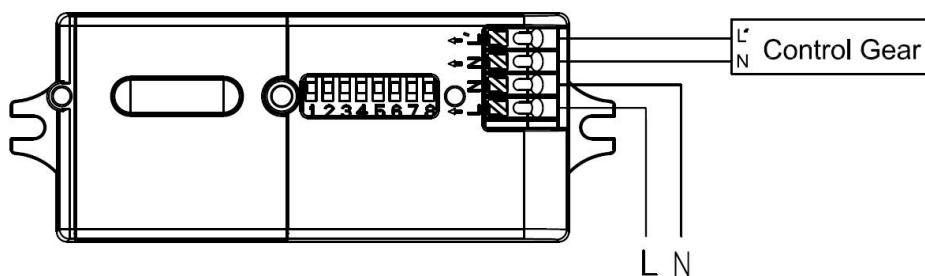


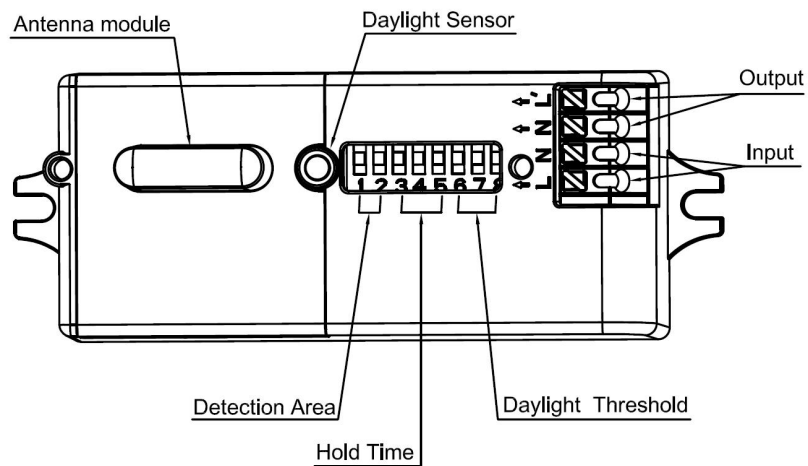
MC098S



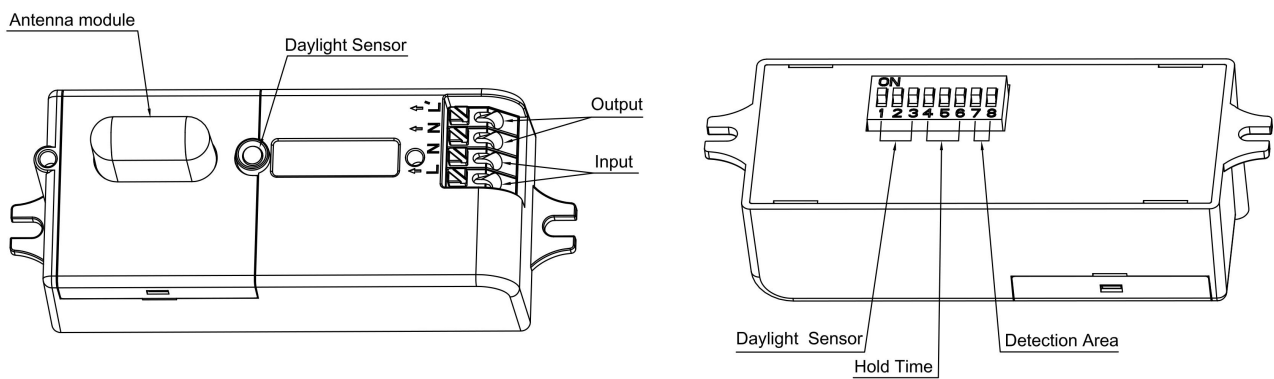
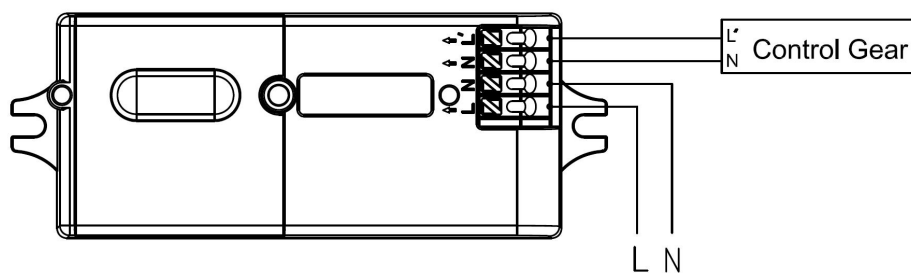
MC098S 1

● Function & Wiring





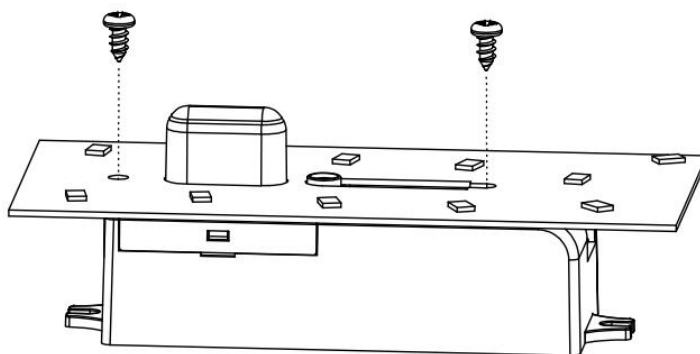
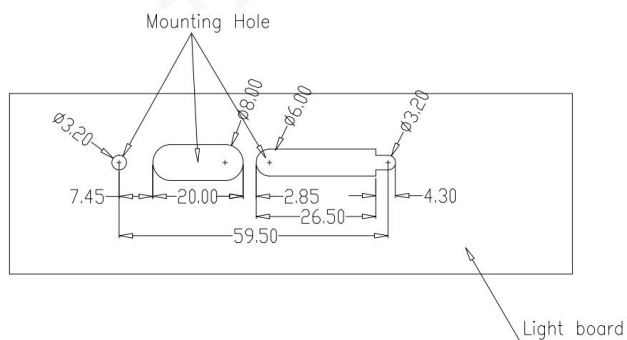
MC098S



MC098S 1

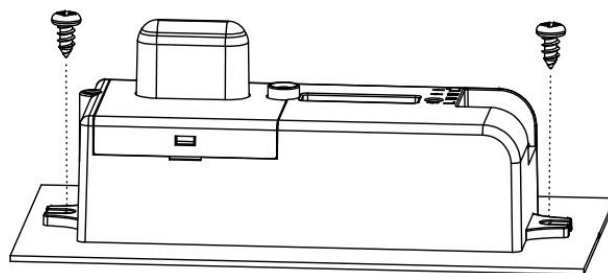
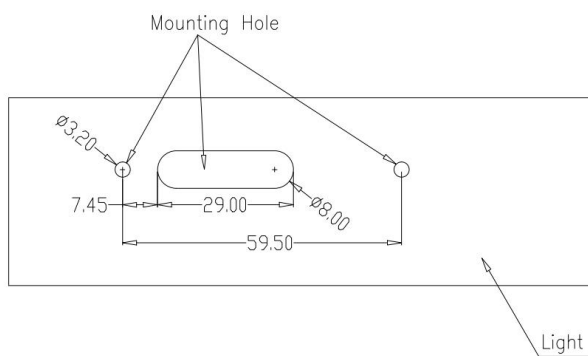
● Installation

Method : 一



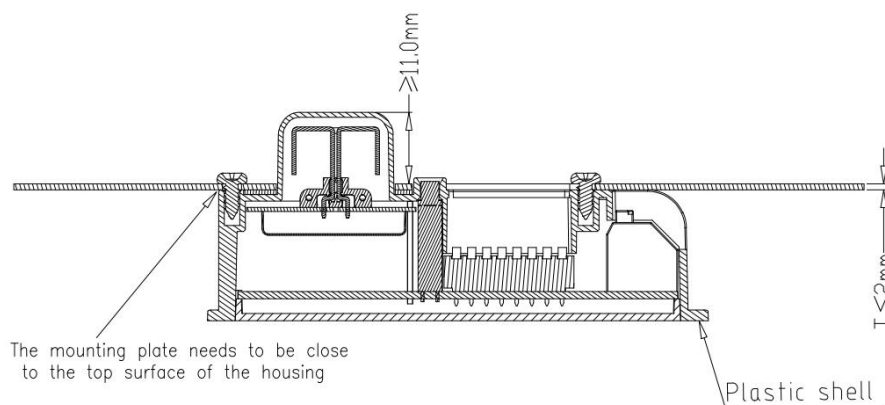
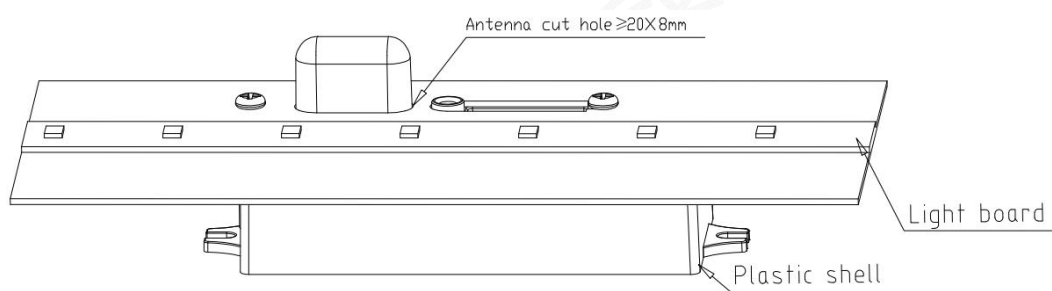
A: Cut the following buckle and using 2 screws.

Method : 二



B: Install the sensor on the LED plate by using 2 screws

Antenna installation tips

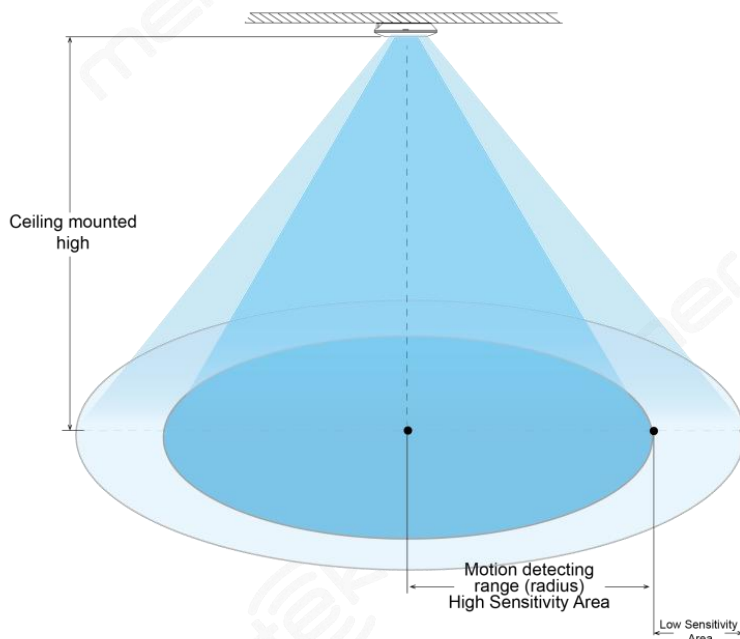


Suggestion: The bottom Angle of the light plate from the microwave antenna should be higher than 2mm, otherwise the induction distance will become closer

【DIP Switch Setting】

| Function | Detection Area | | | Hold Time | | | | Daylight Sensor | | | |
|-----------|----------------|----|----------------|-----------|----|----|-----------|-----------------|----|----|---------------------|
| Dial code | 1 | 2 | Detection area | 3 | 4 | 5 | Hold time | 6 | 7 | 8 | Light control value |
| I | ON | ON | 100% | ON | ON | ON | 5s | ON | ON | ON | 2Lux |
| II | - | ON | 75% | - | ON | ON | 30s | ON | ON | - | 10Lux |
| III | ON | - | 50% | ON | - | ON | 90s | - | ON | - | 30Lux |
| IV | - | - | 25% | - | - | ON | 5min | ON | - | - | 50Lux |
| V | | | | ON | ON | - | 20min | - | - | - | Disable* |
| VI | | | | - | - | - | 30min | | | | |

● Radiation Pattern



【Initialization】

The light will be turned on 100% brightness after power on, and will be turned off after 10 seconds. During initialization, no external motion sensing signal will be detected.

【Default Setting】

Sensitivity: 100% Hold time: 5s Daylight sensor: Disable

【Application Notice】

- The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switch.
- Sensitivity area is related to moving speed of objects, size of moving objects, mounting height, mounting angle, working environment, reflecting materials and etc.. Given detecting area is typical value that was measured by 165cm/65kg testers in an indoor open environment.
- The detection area of the microwave sensor when installed on the wall will be greatly increased compared to when installed on the ceiling. If adopts wall ceiling, please reduce the sensitivity or contact our company to confirm the usage settings. The daylight thresholds are measured on a sunny day without shadow and in an ambient light diffuse reflection status. Different environment and climate cause different brightness values that daylight sensor measures.
- Sensor parameters may need to be reconfigured in different installation environments, please refer to the following instructions or contact the manufacturer.
- Sensor is for indoor use only. The waterproof effect for outdoor or half-outdoor use will be affected. Wind, rain, and moving objects may cause false triggering.
- The installation height of the sensor product cannot exceed 6 meters, and the optimal height is 3 meters. The distance between the two sensors should be greater than 3m.
- When the sensor is installed in a metal lamp, on a metal reflective surface, or in a small closed environment, the microwave will be reflected multiple times and cause false triggering. Please reduce the sensitivity of the sensor or contact the manufacturer for technical support.
- Please make sure that there are no moving signals such as fans, DC motors, sewer pipes, air outlets, etc. around the sensor, otherwise the sensor may cause false triggering.
- Microwaves cannot penetrate metal. Do not place product in a closed or a half-closed metal lamp. Neither metal nor glass is not allowed to cover above the product.