

# KMW206 120VAC Microwave Sensor

## Charging Night Light Controller User Manual

### 1. Basic Product Parameters

| Item                    | Parameter                                                         | Remark                                                        |
|-------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|
| Model No.               | KMW206 120VAC Microwave Sensor<br>Charging Night Light Controller | /                                                             |
| Overall Dimension       | 58MM53MM23.5MM                                                    | Light-transmitting window<br>available in black, silver, gold |
| Input Voltage           | 120V AC                                                           | /                                                             |
| Charging Output Voltage | DC5V                                                              | For built-in battery charging                                 |

### 2. Electrical Performance Specifications

| Item                      | Parameter                                 | Remark                                           |
|---------------------------|-------------------------------------------|--------------------------------------------------|
| Standby Power Consumption | ≤1mA                                      | Ultra-low standby power                          |
| Rechargeable Battery      | 1 piece 18650 / 2000mAh                   | Replaceable battery                              |
| Output Load               | 3W×2 LED light strips,<br>brightness 60LM | Power supply for night light source              |
| Full Charging Time        | ≥2 hours                                  | Requires continuous power supply for<br>charging |

### 3. Microwave Sensing Performance Parameters

| Item                           | Parameter                | Remark                                                                                           |
|--------------------------------|--------------------------|--------------------------------------------------------------------------------------------------|
| Sensing Principle              | 5.8GHz Microwave Sensing | Microwave human body detection                                                                   |
| Sensing Angle                  | 130°±20°                 | /                                                                                                |
| Standard Sensing Distance      | 3~4M                     | Tested indoors with mounting height 1.8~2M                                                       |
| Applicable Installation Height | 1.0M~3.0M                | Overall mounting height range of the module                                                      |
| Light-on Delay Time            | 60 seconds               | Light turns off after human leaves; countdown resets<br>automatically if human is detected again |
| Light Sensor Trigger Threshold | ≤15LUX                   | Fixed lux value; only activated in dim environment                                               |

## 4. Installation & Operation Instructions

1. Cut off external power supply before installation, and confirm the input power is 120VAC.
2. Connect loads and power switches according to the product wiring diagram:

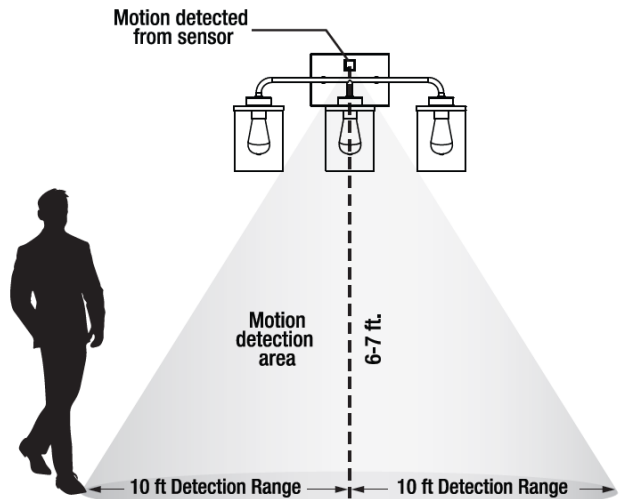
A: BAT terminal for battery connection

B: SW terminal for external control switch of LED1/LED2

C: LED1/LED2 terminals for night light strips connection



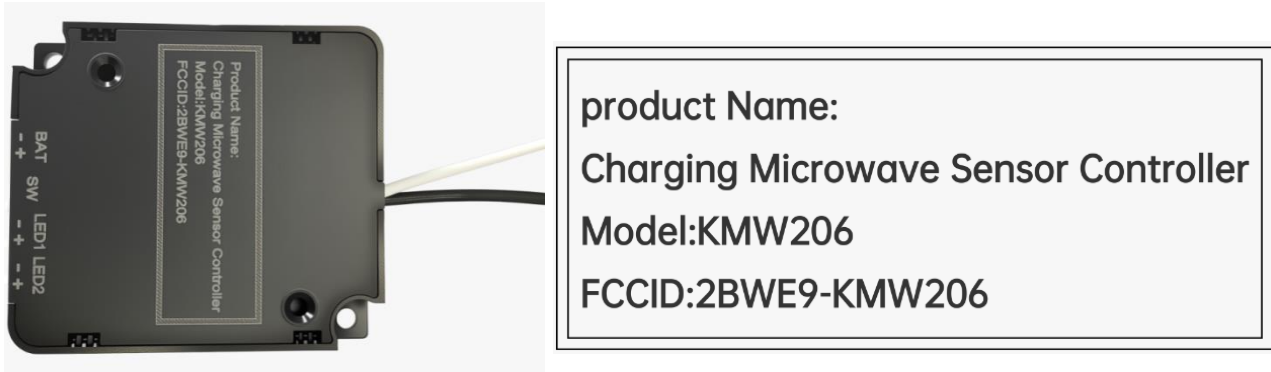
### Motion Detection Range



3. When the external wall AC power switch is turned on, the main light will light up. The main light is powered independently by the wall switch and not controlled by this module.
4. The night light is powered by the built-in battery. An independent toggle switch is equipped on the housing; toggle to ON to activate the night light function.
5. When ambient light  $\leq 15\text{LUX}$  (nighttime) and the wall switch is off (main light off), the microwave sensor detects human movement and turns on the night light for 60 seconds. The countdown restarts if human activity is detected within the sensing area again.
6. The battery is charged via the built-in switching power supply; at least 2 hours of continuous charging is required for full capacity.
7. Battery charging only occurs when the wall switch is turned on and the main light is powered. The module converts 120V AC input to DC5V for battery charging. Built-in charge and discharge protection circuit prevents overcharging and over-discharging to protect the battery.

## 5. Environmental Rating, Protection & Safety Standards

### 5.1 Safety Label Sticking Position



(Model: KMW206, FCC ID: 2BWE9-KMW206, terminals marked BAT, SW, LED1, LED2)

### 5.2 FCC Compliance Statement for Applied Products

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

## 6.Environmental & IP Specifications

| Item                  | Parameter  | Remark                                                                                  |
|-----------------------|------------|-----------------------------------------------------------------------------------------|
| Operating Temperature | -30℃ ~ 50℃ | Induction distance and angle will be affected if temperature is below -30℃ or above 50℃ |
| Storage Temperature   | -20℃ ~ 60℃ | Storage temperature range for idle products                                             |
| IP Rating             | IP20       | For indoor dry use only; avoid water splashing                                          |

## Warranty Terms

Official warranty period: 2 years

For defective non-human-damaged products within warranty, replacement service is provided.