

# THORGEON

SENSORS

## MICROWAVE SENSOR

02020



Manufactured in PRC



LED  
POWER  
300W

360°

6m

TIME

LUX

Hz  
50-60

220-240V

2-4m

INDOOR

-20°C

+40°C

IP20

CE EAC UK CA



# THORGEON



[www.thorgeon.com](http://www.thorgeon.com)

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Developed in Latvia

## MICROWAVE SENSOR

The product is a new saving-energy switch; it adopts microwave sensor mould with high-frequency electro-magnetic wave (5.8GHz) and integrated circuit. It gathers automatism, convenience, safety, saving-energy and practical functions. The wide detection field depends on detectors. It works by receiving human motion. When one enters the detection field, it can start the load at once and identify automatically day and night. Its installation is very convenient and its using is very wide. Detection is possible to go through doors, panes of glass or thin walls.

### SPECIFICATION:

Power Sourcing: 220 -240V/AC

Detection Range: 360°

Ambient Light: <3-2000LUX (Adjustable)

Time Delay: Min. 10sec±3sec Max. 12min±1min

Installing Height: 1.5-3.5m

Power Consumption: approx 0.9W

Power Frequency: 50/60Hz

Detection Distance: 1-8m (radius), adjustable

HF System: 5.8GHz CW radar, ISM band

Transmission Power: <0.2mW

Rated Load: LED 1200W INCANDESCENT 300W

Detection Motion Speed: 0.6-1.5m/s

### FUNCTION:

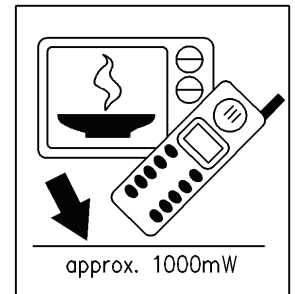
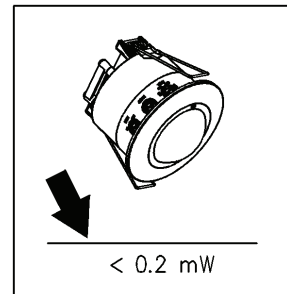
Can identify day and night: It can work in the daytime and at night when it is adjusted on the "sun" position (max). It can work in the ambient light less than 3LUX when it is adjusted on the "3" position (min). As for the adjustment pattern, please refer to the testing pattern.

SENS adjustable: It can be adjusted according to using location. The detection distance of low sensitivity could be only 2m and high sensitivity could be 16m which fits for large room.

Time-Delay is added continually: When it receives the second induction signals within the first induction, it will restart to time from the moment.

Time-Delay is adjustable. It can be set according to the consumer's desire. The minimum time is 10sec±3sec. The maximum is 12min±1min.

NOTE: the high-frequency output of the HF sensor is <0.2Mw- that is just one 5000th of the transmission power of a mobile phone or the output of a microwave oven, the baby can not touch it

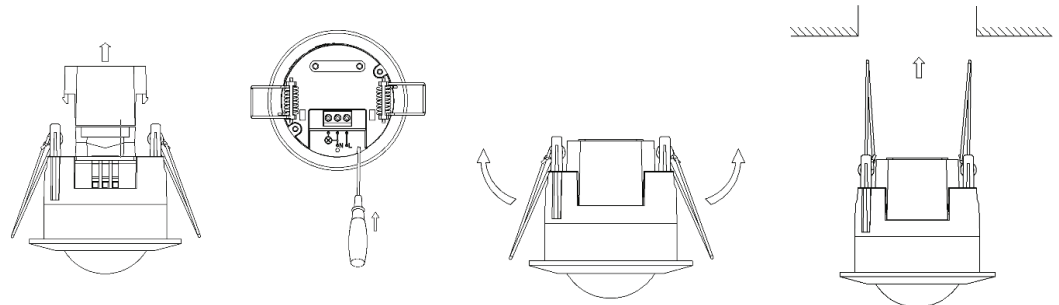


### INSTALLATION: (see the diagram)

Switch off the power.

Open the transparent vinyl cover which is at the bottom of the sensor.

.Loose the screws in the connection terminal, and then connect the power and rated load to connection terminal of sensor according to connection sketch map.



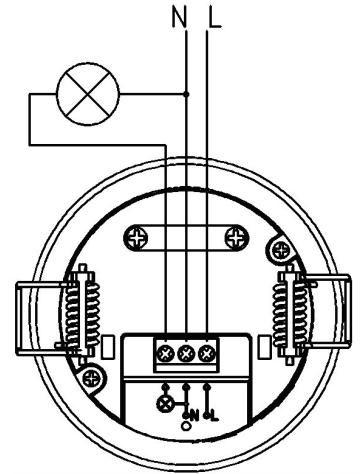
Tighten the screw and put the transparent vinyl cover into the original location

Fold the metal spring of the sensor upwards, until they are in "I" position with sensor, and then put the sensor into the hole or installation box which is on the ceiling and has the similar size with the sensor.

Releasing the spring, the sensor will be set in this installation position.

After finishing installing, the sensor could be connected to the power and tested.

## CONNECTION-WIRE DIAGRAM:



## TEST:

Turn the LUX knob clockwise on the maximum (sun). Turn the SENS knob clockwise on the maximum (+). Turn the TIME knob anti-clockwise on the minimum (10s).

When you switch on the power, the light will be on at once. And 10sec±3sec later the light will be off automatically. Then if the sensor receives induction signal again, it can work normally.

When the sensor receives the second induction signals within the first induction, it will restart to time from the moment.

Turn LUX knob anti-clockwise on the minimum (3). If the ambient light is less than 3LUX (darkness), the inductor load could work when it receives induction signal.

Note: When testing in daylight, please turn LUX knob to (SUN) position, otherwise the sensor could not work!

## NOTES:

Electrician or experienced human can install it.

Can not be installed on the uneven and shaky surface

In front of the sensor there shouldn't be obstructive object affecting detection.

Avoid installing it near the metal and glass which may affect the sensor.

For your safety, please don't open the case if you find hitch after installation.

## SOME PROBLEM AND SOLVED WAY:

The load don't work:

- Check the power and the load.
- Whether the indicator light is turned on after sensing? If yes, please check load.
- If the indicator light does not turn on after sensing, please check if the working light corresponds to the ambient light.
- Please check if the working voltage corresponds to the power source.

The sensitivity is poor:

- Please check the ambient temperature.
- Please check if the signals source is in the detection fields.
- Please check the installation height.

The sensor can't shut automatically the load:

- If there are continual signals in the detection fields.
- If the time delay is set to the longest.
- If the power corresponds to the instruction.

