

Product Description

The GAVA presence sensor is a surface-mounted device specifically designed for large spaces. It features a minimal white finish with compact dimensions of 110mm by 110mm and connects via a 4-pin terminal. Utilizing millimeter wave radar technology within the 2.4Ghz to 24.25GHz ISM band, the device effectively monitors room occupancy. It offers highly customizable settings, including a detection area of up to 4 meters, an adjustable hold time, and a wide 100-degree detecting angle. Furthermore, the sensor operates on a standard 100-240V AC input and can safely handle a maximum load capacity of 800W for resistive loading.

Sensor Body

Sensor Finish	: White
Dimension	: 110mm x 110mm
Connection	: 4pin Terminal

Sensor Metrics

Mounting Type	: Surface Mounted
Sensor Type	: Presence Sensor
Radar Frequency	: 2.4Ghz-24.25gHZ ISM band
Transmitting Power	: 5mW max
Detection Area	: Remote / DIP setting : 0-4m
Hold time	: Dip Setting : 10s/30s/1min/3min/5min/30min
Day light Sensor Threshold	: 5-150lux/ Disable
Remote Control	: Available
Mounting Height	: 2.5-4.0m typical value
Detecting Angle	: 100°

Max. load capacity	: 800W resistive loading
	: 400W inductive Loading
Motion Detection Diameter	: 6-8 Max
Absence Switch to Presence	: Within 0.5s
Presence switch to Absence	: less than 15s
Ceiling mounting Installation	: Available
Sensor Parameter Adjustable	: By Dip switch or Remote
Sensing function based on	: Millimeter wave radar technology

Input/Output

Input Voltage	: 100-240V AC 50-60HZ
Rated Voltage	: 220V AC
Consumption	: <1W 230V DC
Output Signal	: 1 Channel ON/OFF
Max Surge current	: 60A

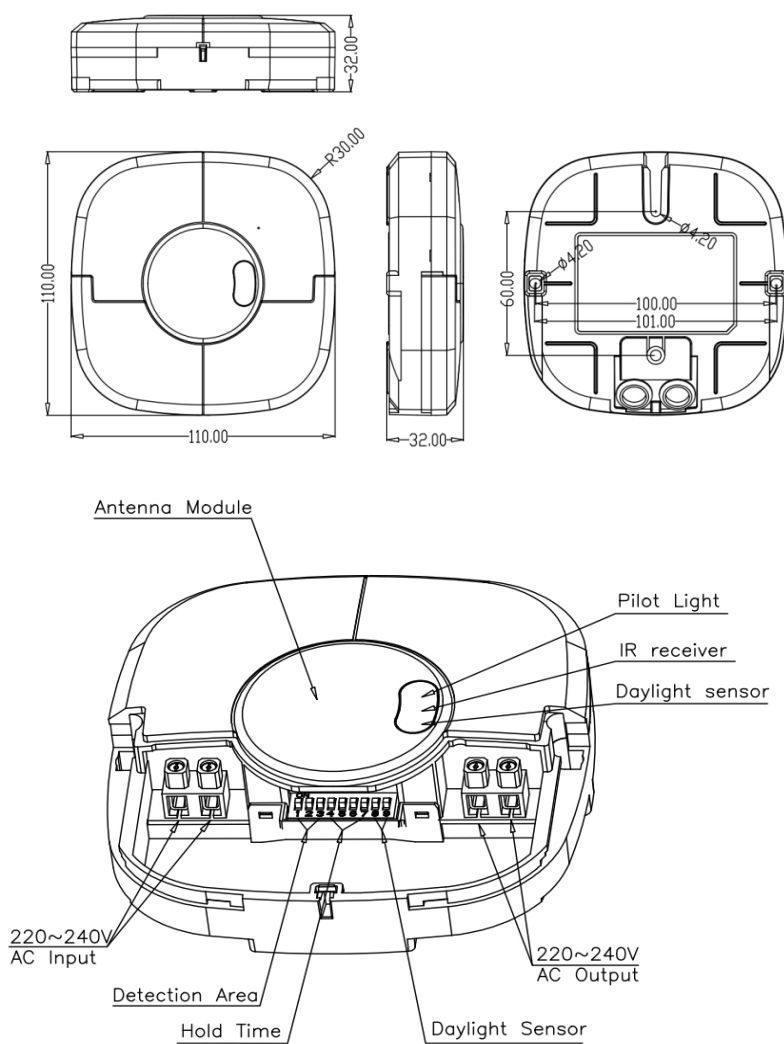
Application

Sensitivity	: High / Medium / Low
Installation	: Surface Mounting
Working temperature	: 0°C...+50°C
Storage Temperature	: -40°C~...+80°C

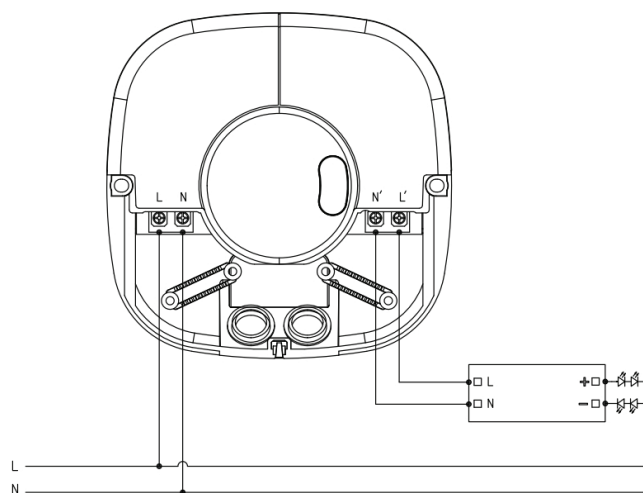
Protection

IP Rating	: IP20
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DIMENSION & FUNCTION DIAGRAM

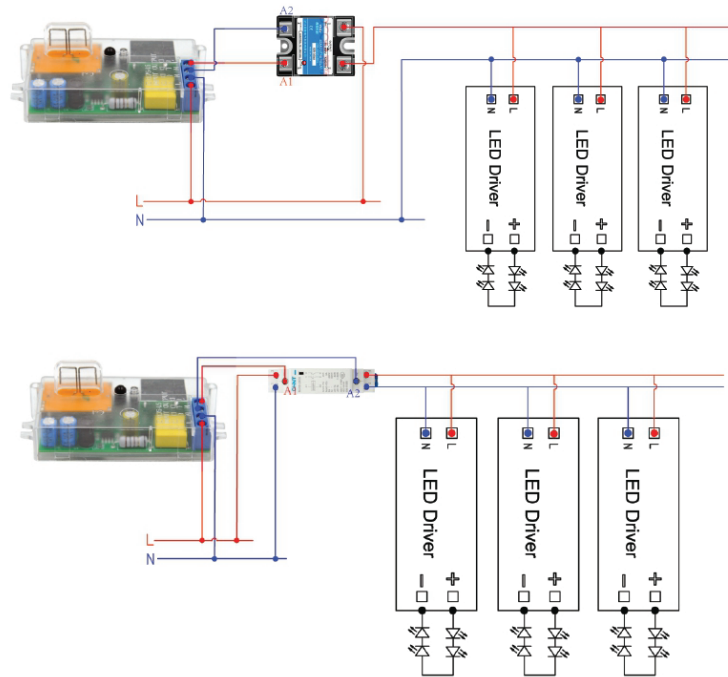


WIRING FUNCTION



Wiring layout suggestion:

1. LN terminal stands for AC input, L'N' stands for AC output, please wiring correctly
2. One sensor's max loading capacity is 800w resistive loading and 400w inductive loading for one single load. if you want connect more load in one loop, we recommend to add an AC contactor in our output LN terminal to avoid momentary surge overload.



Initialization

When powered on, sensor indicator will turn off after flashing for 10S and will enter a 20S detection cycle, if there's presence detected, then sensor will report presence and enter hold time calculating, if absence detected, then sensor will report absence. During initialization, sensor will not detect moving signal and you can use our MH10 remote or DIP switch to adjust detection area hold time and daylight sensor etc parameter.

Factory setting

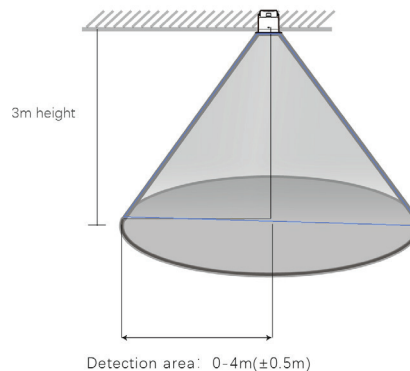
Detection Area: 4m(Medium sensitivity)

Hold Time: 30s

Indicator light: ON

Daylight sensor: Disable

Detection radiation



Detection Signal

The product detects human moving, minor moving, and presence signals, and realizes the detection of human-existing/no-human in non-sleep state. The following is a description of the moving, minor moving and presence signals:

- **Major movement:** detect the human significant moving (walking) in the detection area.
- **Minor movement:** detect the human slight moving in the detection area, such as leaning forward, leaning forwarder and back, swinging limbs, shaking head, typing, playing with mobile phones and so on.
- **Micro movement:** detect human abdominal and thoracic expansion behaviors caused by breathing, but not detect moving signal and minor moving signal.



Major movement



Minor movement



Micro movement

Detection Area

	1	2	3	
I	ON	ON	ON	4m
II	-	ON		3.5m
III	ON	-	-	3m
IV	-	-		2.5m
V	ON	ON	-	2m
VI	-	ON		1.5m
VII	ON	-	ON	1m
VIII	-	-		0.5m

Hold Time

	4	5	6	7	
I	ON	ON	ON	ON	10S
II	ON	-	ON	ON	30S
III	ON	ON	-	ON	1min
IV	ON	ON	ON	-	3min
V	ON	ON	-	-	5min
VI	-	-	ON	ON	10min
VII	-	-	-	-	30min

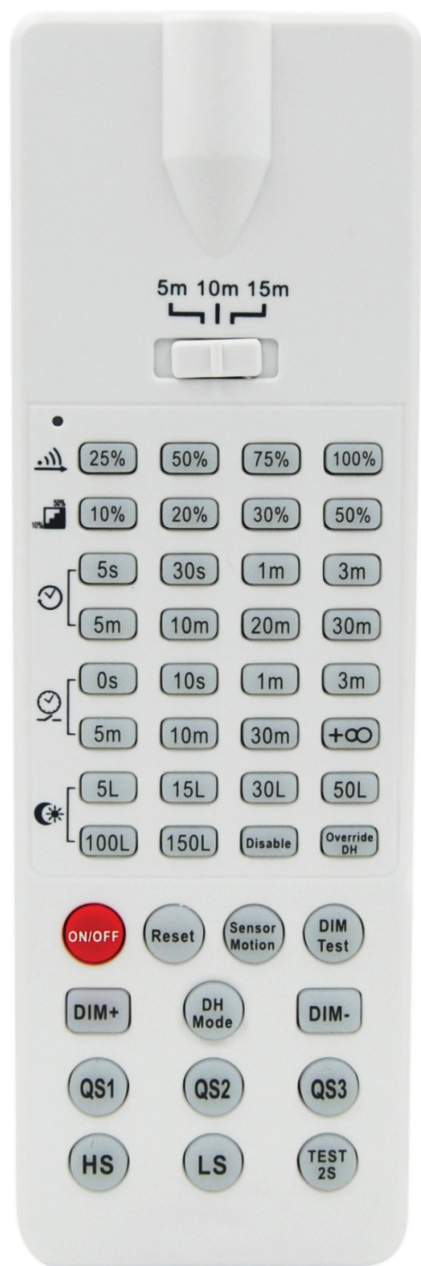
Remark: presence detection will be available only when hold time be set >30s

Daylight Sensor

8	9	
ON	ON	5Lux
-	ON	50Lux
ON	-	150Lux
-	-	Disable

Remark: when daylight sensor set disable, light will turn on once motion detected regardless of environment lux

Remote



Detection area radius:

QS1+100%=4m, QS1+75%=3.5m, QS1+50%=3m, QS1+25%=2.5m,
QS2+100%=2m, QS2+75%=1.5m, QS2+50%=1m, QS2+25%=0.5m

Hold time: 10s (5S button) /30s/1min/3min/5min/10min/20min/30min

0S:High sensitivity 10S:Medium sensitivity 1m:Low sensitivity
10m: Slight self-learning 30m: Medium self-learning
∞: Heavy self-learning

Daylight threshold: 5lux/15lux/30lux/50lux/100lux/150lux/Disable

ON/OFF: Disable sensor detection function

Sensor motion: Enable sensor detection function

Reset: all parameter back to factory setting

DH mode:long press>3S to disable presence detection function