

Product specification

Description	D Series Radar Sensor Module	
Model No.	RAVOLD2300B	
Version	1.0.0V	
Page	5 Pages	
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1. Features



1) The sensing distance is farther than the infrared sensing module, the angle is wider, and there is no dead zone, lens and lens aging problems

2) Not affected by temperature, humidity, airflow, dust, noise, light and dark, etc., and has strong anti-interference ability

3) Can penetrate acrylic, glass and thin non-metallic materials

4) Built-in MCU, embedded with multiple digital filtering algorithms, has higher immunity, small size and low power consumption

2. Function Description

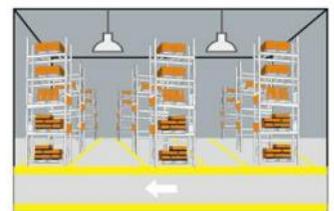
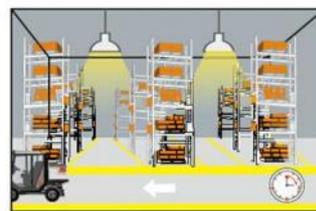
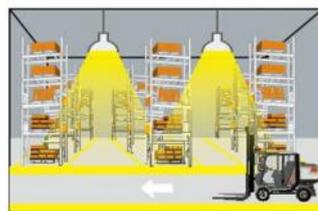
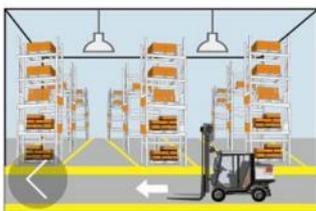
1) Photosensitive turn on

When the ambient light is sufficient, it will not turn on even if there is mobile signal

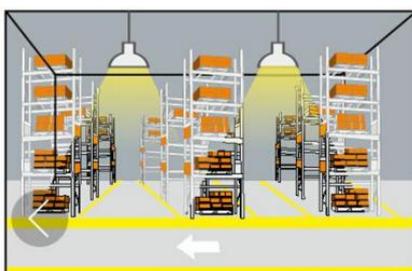
When the ambient light is insufficient, the sensor detects movement signals and the lights turn on

After the delay time, if no mobile signal is detected, the light will be adjusted to a set low brightness.

After the waiting time, if no movement is detected in the detection area, the light will automatically turnoff.



2) Always on



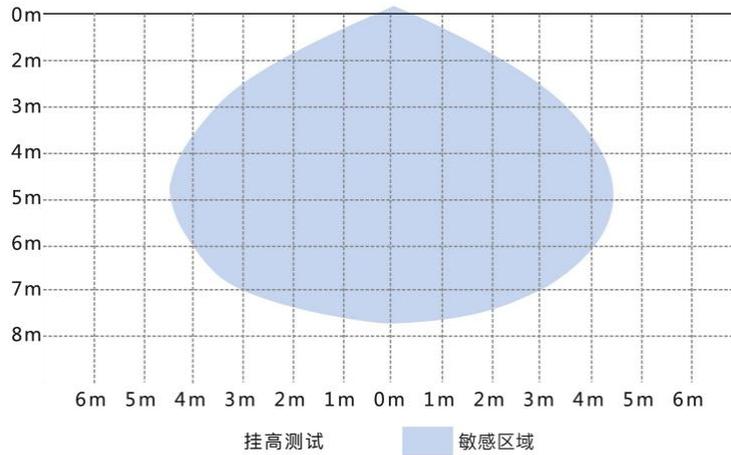
3. Dial setting

1/2: Sensing distance setting			3/4: Sensing delay time setting		
3-4m	ON	ON	30S	ON	ON
2-3m	OFF	ON	3min	OFF	ON
1-2m	ON	OFF	5min	ON	OFF
Always on	OFF	OFF	10min	OFF	OFF

5/6: Photosensitivity threshold setting		
< 10lux	ON	ON
< 30lux	OFF	ON
< 50lux	ON	OFF
Turn off light sensitivity	OFF	OFF

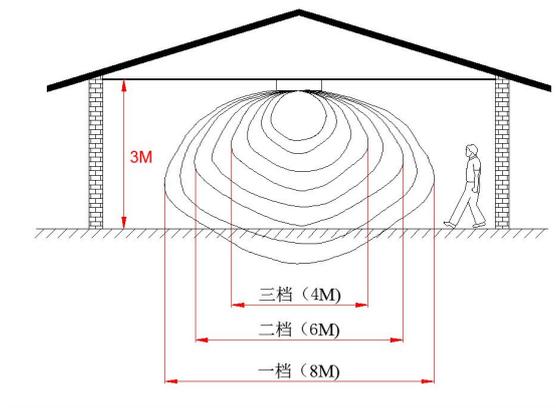
4. Radiation Pattern

Ceiling installation: 3m



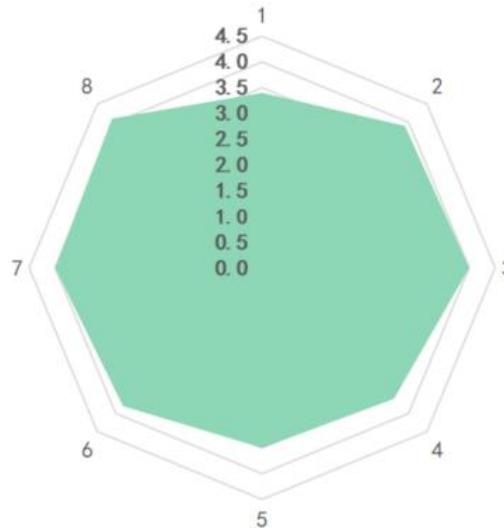
Radar radiation area map:

(high installation, schematic diagram above the lamp)



Radar radiation area map:

(3m installation, schematic diagram)



5. 0Startup process and initialization

When the sensor is powered on for the first time, the light will turn on to 100% brightness, and then turn off after 5 seconds. During the initialization period, the sensor will not detect external motion sensing signals.

6. Application Notes

1. Sensor lamps should be installed by professional electricians. Please cut off the power before installation, wiring, changing settings, etc.
2. The product has good penetrating ability to plastic, wood, etc., but there should be no metal accessories, metal casing, glass casing, etc. in front of or near the antenna of the microwave module, otherwise it will affect the transmission and reception of the microwave antenna.
3. This product is only suitable for indoor installation. When installed semi-outdoor or outdoors, wind or rain may be regarded as mobile signal triggering.
4. The antenna surface of the sensor should avoid facing the AC driving power supply, and should be kept away from high-power devices such as rectifier bridges, transformers, and switching tubes of the driving power supply.

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To prevent power frequency signals from interfering with the microwave module.

5. The sensing distance is related to factors such as the moving speed of the moving object, the size of the moving object, the installation height, the installation angle, whether the installation environment is open, and the material of the reflector. The detection distances given in the specifications are typical values, measured by a 175cm tall tester in an open indoor environment. The detection distance when installed on the wall will be greatly increased compared to that when installed on the ceiling. If you use wall installation, please reduce the sensitivity or use it in conjunction with

Contact our company to confirm the usage settings.

6. Long-term vibrating equipment or moving objects should be avoided around the sensor. The vibration signal will be regarded as a moving signal to trigger the induction.

7. If a pet passes by in the detection area, the sensor may be triggered.

8. The light sensitivity threshold is in a sunny environment, no shadows, and ambient light diffuse reflection conditions. In different time periods, climates, and environments, the illumination values detected by the light sensor may be different.

9. It is recommended that the installation distance between the product and the router should be greater than 1.5m.

10. The installation plane of the product (for example: aluminum substrate, PCB board) needs to be a certain height different from the antenna plane of the microwave module.

The line plane should be more than 5mm higher than the nearby plane to achieve the best detection effect.

11. The product cannot detect mobile signals during the power-on self-test process and will work normally after initialization.