



CS-MRD58K-LSD1

Microwave induction module

specification

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catalogue

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1 character

- The module has built-in microwave induction chip with independent intellectual property rights of Jiale, which can effectively identify the motion state of people and objects
- Small size, high integration, suitable for a variety of application scenarios
- The module is equipped with light sensing detection function, which can effectively identify illuminance
- Temperature range -20°C -80°C



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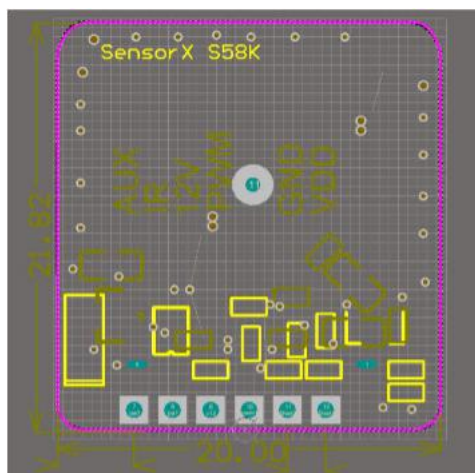
2 application area

- illumination lamps and lanterns
- protection equipment
- smart home
- children's toys
- Intelligent sensing equipment

3 specification parameter

parameter	least value	typical value	maximum value	unit
working voltage	8	10	12	V
working current	20	25	30	mA
operating temperature	-20	25	70	$^{\circ}\text{C}$
microwave frequency	5.725	5.8	5.875	GHz
Light intensity of illumination	10		20	Lux
sensing distance	4		6	m
delay time		30		s

4 Size Interface Description



serial number	port	describe
1	retain	retain
2	retain	retain
3	VCC	DC 8-12V
4	PWM	PWM S10CK
5	GND	GND
6	retain	retain

5 functional description

- Induction output high level, no sensitive, reach the delay time, output low level.

6 matters need attention

- When the module is installed in the lamp, there should be no metal material on the front of the module, and it should be far away from the high-voltage line as far as possible, otherwise it is easy to affect the induction signal and produce false trigger phenomenon. Your company suggests that the bottom of the lamp module should be padded about 12mm high.
- The actual installation of lamps should be far away from metal media, motors, fans, air conditioning ports and other environments, otherwise it is easy to produce signal interference, affect the induction distance
- The ripple of the module power supply is recommended to be less than 50mv. Otherwise, the induction signal may be affected, resulting in false trigger.
- The induction distance is related to lamp material, module installation, test environment, tester height, movement speed and other factors. The distance is subject to the actual test. Reference standard: no interference with open indoor environment, height 170cm, movement speed 1m/s, normal standing and walking, sensing distance 5-7 meters, different Angle test distance deviation is normal phenomenon;
- Within the scope permitted by law, the company reserves the right of final interpretation.

7 Module is installed

- The connection terminal on the module can be connected to the PCB board through the wave peak and reflux according to the customer's process requirements.

8 Module function Testing.

- Use the DC power supply to input the DC 5V 20MA power supply to the module and connect to the LED indicator. The LED indicator is on for 20s after the module is powered on. If no moving object moves within 20 seconds, the indicator is off. Note The module is functioning properly.

FCC Caution:

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

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IMPORTANT NOTE:

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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

Integration instructions for host product manufacturers according to KDB 996369 D03
OEM

Manual v01

2.2 List of applicable FCC rules

CFR 47 FCC PART 15 SUBPART C has been investigated. It is applicable to the modular.

2.3 Specific operational use conditions

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.

2.4 Limited module procedures

Not applicable

2.5 Trace antenna designs

Not applicable

2.6 RF exposure considerations

To maintain compliance with FCC’s RF Exposure guidelines

2.7 Antennas

This radio transmitter FCC ID: **2A7EACS-MRD58K-LSD1** has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna Description	Antenna Type	Frequency Range (MHz)	Maximum antenna gain(dBi)
5G Antenna	PCB	5728-5873MHz	1.62dBi

2.8 Label and compliance information

The final end product must be labeled in a visible area with the following" Contains FCC ID: **2A7EACS-MRD58K-LSD1**"

2.9 Information on test modes and additional testing requirements

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.