



CS-MRD-03A

Microwave motion sensor

Specification

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Version history

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0 Amendment

1 Feature

- CS-MRD-03A microwave module, which applies colasmart self-R&D CS5802 microwave chip, can effectively sense human and entity motion
- Light sensor is available when correspondent component is exter-connected
- IR remote is available when correspondent component is exter-connected ,and microwave motion sensor distance,hold time,lux threshold etc can be adjusted by IR remote
- Plate-antenna applied for the sake of max long-distance detection purpose
- Working temperature be -20°C – 70°C



CS-MRD-03A

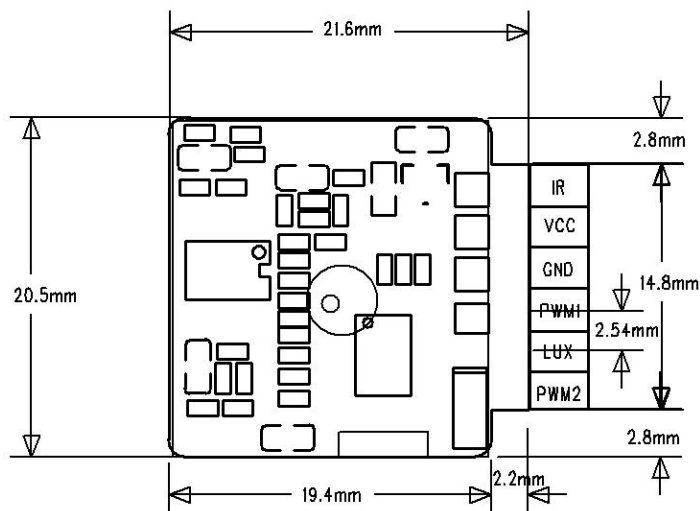
2 Application

- Lighting
- Security
- Smart home
- Toy
- Smart sense device

3 Specification

Parameter	Min value	Typical value	Max value	Unit
Working voltage	8	10	12	V
Working current	20		25	mA
Working temperature	-20	20	70	$^{\circ}\text{C}$
Frequency	5.753	5.8	5.842	GHz
Sense distance		5	8	m
Lux threshold	10	30	50	Lux
Hold time		30		s

4 Drawing



Number	Pin	Definition
1	IR	IR connect PIN
2	VCC	DC 8-12V
3	GND	GND
4	PWM1	PWM1 output
5	LUX	Light sensor connect
6	PWM2	PWM2 output

5 Application examples

One of the light applications as follow



To satisfy FCC exterior labeling requirements, the following text must be placed on the exterior of the end product "Contains Transmitter module FCC ID: 2ASH6-CSMRD03" . The modular must be installed in the host that assign by Hangzhou days lighting electric appliance., ltd. as below, if other host types used would need further evaluation and possible C2PC if they are not significantly similar to the one tested.

Host information

company name: Hangzhou days lighting electric appliance., ltd.
 Product name: Light
 model name: A60-PA-C 6W

6 Function introduce

basic function

- If IR is not exter-connected,CS-MRD-03A only has microwave motion sense function
- When motion detected,CS-MRD-03A will output high level signal,and low level signal after hold time
- Motion sensor detect distance is normally 5-8m for reference, yet real detect distance shall refer to actual environment application test
- Hold time factory setting as 30s
- Light sensor lux threshold factory setting as 30lux,yet it'll have some tolerance according to application environment and shall refer to actual environment application test

7 Remark

- Sense range will be different according to different install height and sense angle
- Application environment, entity motion velocity etc will effect module sense range ,so above sense range is only for your reference based on ideal circumstance
- Actual lux threshold is related to your light case material, our value is this specification is only for reference

8 FCC warning

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.

MODIFICATION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

9 Label statement:

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