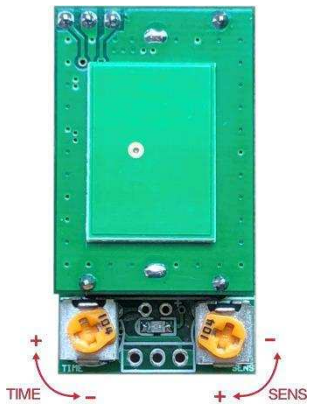
HFS-DC06F

1.Product introduction

5.8G Microwave (Radar) Induction Module is a high-sensitivity sensor developed by using Doppler effect and radar induction principle. It can be sensed to people or objects with reflective surface. It has the characteristics of long induction distance, wide range, high sensitivity, not affected by temperature, strong anti-jamming ability and non-interference. It meets the requirements of various authentication. Advantages, widely used in lamps, anti-theft alarm, human induction, and other intelligent products.

2. Product characteristics

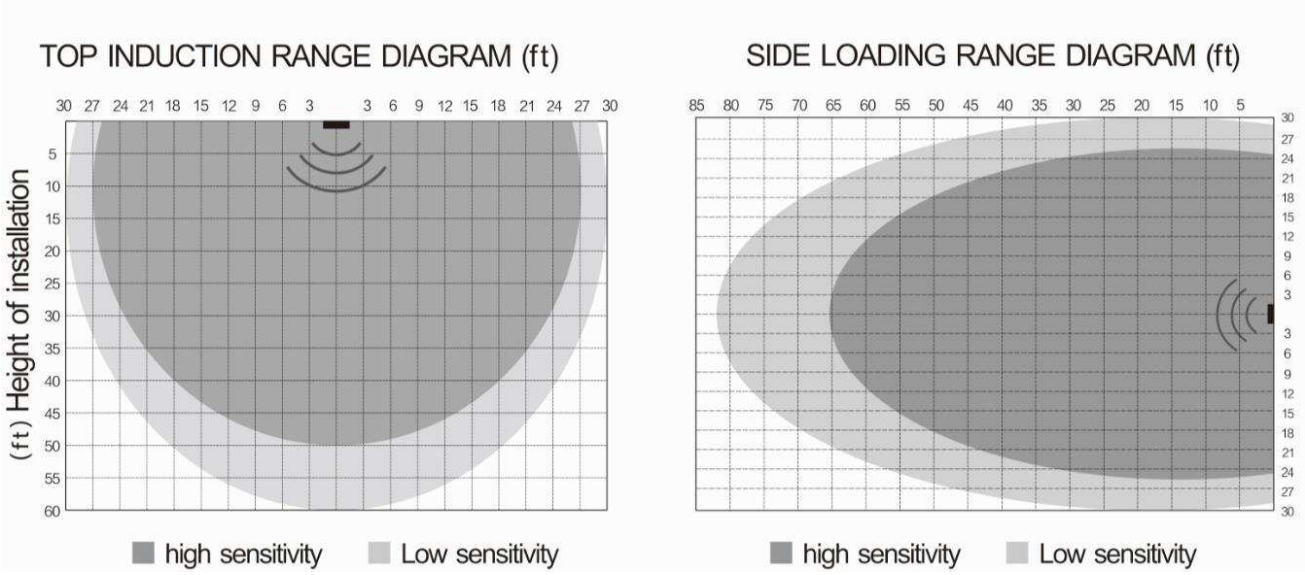


1. Compared with other low-frequency microwave induction, the products installed with 5.8G microwave module can be commercially used in a large area, and have stronger anti-interference ability and no interference with each other.
2. Compared with infrared induction, this module will not affect the distance because of the temperature change, can be hidden in the product, does not destroy its overall appearance;
3. Multiple voltage input and output modes are available to satisfy all customers.
4. users can customize the appearance size, software and hardware functions according to their requirements.
5. the module is continuous touch type (detect the last action) and has its own optical control function.
6. The maximum installation height of 15 meters, The lateral installation distance is far above the top installation.

3. Electrical parameters

Model:	HFS-DC06F
Appearance size:	40*22*12MM
Frequency:	5.8Ghz ISM band
Input voltage:	DC5V（Stable voltage, current greater than 30MA)
Output mode:	5V TTL
Working temperature:	-20℃ — 75℃
Induction time:	2S — 120S adjustable
Sensing range:	The front of the antenna 180 degrees
Induction distance:	0.5-20m adjustable
installation height:	15m
Default parameters of factory:	Time two seconds, the furthest distance

4. Induction range diagram:



5. Functional application

1, the first power on will output high level indicator lights will be on, 2 seconds to low level, followed by 6 seconds.The self checking time does not accept any signals outside, and it can enter normal working mode after 6 seconds.

2, two adjustment knobs have "TIME" and "SENS" logo below, and the right adjustment knob is extended.The shortest time and the farthest distance of induction, if the right state is reversed, the longest delay time.From the nearest

3, time regulation is basically linear, but distance regulation is nonlinear.

4, the input voltage must be regulated after voltage, current greater than 30MA (Module power consumption is about 25MA)

5. The product should not be installed beside a large area of metal body, not in a completely closed metal shell, so It will affect the performance of the product or cause it to be out of order. If installed in the ceiling lamp, try not to use it.Let the metal part be higher than the antenna plane (the right picture is the antenna front, that is the induction surface).

6. failure analysis (separate test module)

1. After the power is switched on, an indicator light will always shine or will light up and extinguish itself.Reason 1, input voltage problems, such as: voltage instability is fluctuant, current is not enough, voltage after boosting.Cause 2. Module placement is unstable, vibration, or the induction range has been shifted to the highest sensitivity when placed in a small space

2, the second time after the power on, no response.Cause 1, no load voltage is higher than rated voltage, module is breakdown.

3, distance or ininduction Cause 1. Input voltage is lower than rated voltage, adjust knob position at close range, and cover photosensitive element in daytime test with light control function