

PD-V1 360° 5.8GHz Microwave Motion Sensor

Application

- Intelligent switch
- Automatic light
- Intruder detect

Feature and advantage

- Low wireless power output
- Low power consumption
- Non-contact detection
- Easy to connect with the controller
- High anti-jamming ability
- Suit various harsh environment
- Low noise output

PD-V1 360° 5.8GHz Microwave Motion Sensor is a C-Band Bi-Static Doppler transceiver module. It's built-in Resonator Oscillator (CRO). This module, which uses the built-in amplifier circuit and directly outputs amplification signal, saves external amplifier circuit, makes signal processing simpler and makes it easier to connect with the controller.

This module is ideally suitable for occupancy sensor in automatic lighting switches. It can also be used for ceiling mount intruder detectors.

Test Report to

EN 300 440-1 V1.5.1:

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1GHz to 40GHz frequency range;

Part 1: Technical characteristics and test methods

EN 300 440-2 V1.3.1:

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1GHz to 40GHz frequency range;

Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive

EN 50371:2002:

Restrictions for Human Exposure to EM Fields

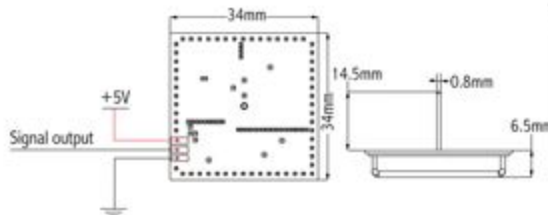
Antenna Beam Pattern(Omni-directional)



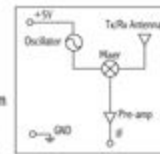
FCC Part 15.245

limited to intentional radiators used as field disturbance sensors, excluding perimeter protection systems.

Products size



Block diagram and connection



Parameter	Notes	Min	Typ	Max	Units
Frequency Setting	1	5.75	5.80	5.85	GHz
Radiated Power (EIRP)	1	0.10	0.12	0.15	mW
Settling Time		5		10	mS
Received Signal Strength	2	150	200	300	μVp-p
Noise	3	100	150	200	mVrms
Supply Voltage		4.75	5.00	5.25	VDC
Current Consumption		18	20	25	mA
Pulse Repetition Frequency	4	2.0	2.2	3.0	KHz
Pulse Width	4	15	50	70	μSec
Operating Temperature		-15	22	75	°C
Weight		6.0	6.5	7.0	g

Note1: The radiated emissions is designed to meet FCC rules.

Note2: The Received Signal Strength(RSS) is measured at the total 1 Ways path loss of 36dB.

Note3: The noise voltages are measured from 10Hz to 100Hz at the Output port, inside an Anechoic chamber.

Note4: Pulse operation