PIR & Light Sensor

Featuring LoRaWAN®

WS202



Milesight WS202 is a LoRaWAN® PIR sensor based on passive infrared technology to detect a motion or occupancy. WS202 can detect whether there is movement within the range of 6-8 m and send the changes via LoRaWAN® network. Besides, WS202 equips with light sensor which can link PIR detection results to trigger scenes. With compact size and powered battery, WS202 is easy to install everywhere. Compliant with Milesight Development Platform, users can know the alarms or occupancy of rooms and trigger other sensors or appliances remotely.

WS202 can be widely used in smart homes, smart offices, schools, warehouses, etc.

◆ Features

- Occupancy or motion detection based on passive infrared and Fresnel Lens
- Easily to install with the convenient size
- Built-in light sensor, combine PIR sensor to achieve triggers
- Ultra-wide-distance wireless transmission up to line of sight of 15 km
- Equipped with NFC for one touch configuration, support card emulation mode
- Support Milesight D2D protocol to enable ultra-low latency and directly control without gateway
- Function well with standard LoRaWAN® gateways and network servers
- Compliant with Milesight IoT Cloud and Milesight Development Platform

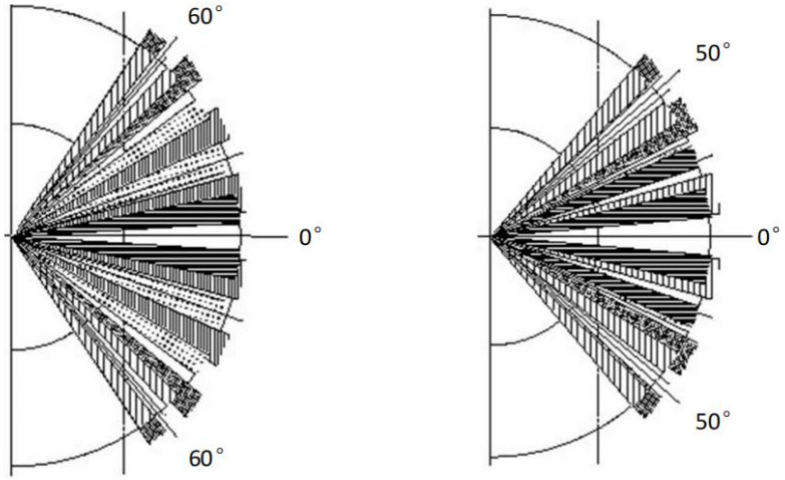
◆ Specifications

Wireless Transmission	
Technology	LoRaWAN®, Milesight D2D
Antenna	Internal Antenna
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
Tx Power	16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz)
Sensitivity	-137 dBm @300bps
Mode	OTAA/ABP Class A
Measurement	
PIR	
Detection Area	120 ° Horizontal, 100 ° Vertical
Detection Distance	Maximum 8 m
Light	
Status	Bright/Dark (Determine 1-60000 lux as Bright or Dark according to custom threshold)
Others	
LED Indicator	1 × Status Indicator
Button	1 × Reset Button (Internal)
Software	
Configuration	Mobile App via NFC
Advanced Feature	Milesight D2D Controller, Threshold Alarm
Physical Characteristics	
Power Supply	1 × 1650 mAh ER14335 Li-$SOCl_2$ Battery
Battery Life* (30 min interval + 30 triggers per day, 25°C)	Around 4.2 years (SF7, EU868) Around 2.4 years (SF10, EU868) Around 3.9 years (SF7, US915) Around 2 years (SF10, US915)
Battery Life*	Around 4 years (30 min interval + 30 triggers per day)
Operating Temperature	-20°C ~ 60°C
Relative Humidity	0% ~ 90% (non-condensing)
Ingress Protection	IP30
Material	Anti-flaming Polycarbonate
Color	White

Dimension	50 × 50 × 23.8 mm (1.97 × 1.97 × 0.94 in) Lens: Φ 17.2mm (0.68 in)
Weight	40g (Battery Included)
Installation	On the flat surfaces with screws or 3M tapes
Approvals	
Regulatory	CE, FCC, RoHS, LoRaWAN® Certified
Safety	EN62368-1

* Tested under laboratory conditions and for guideline purposes only.

◆ PIR Area



◆ Dimensions (mm)

