



Motion & TH Sensor Featuring LoRaWAN® WS203



Milesight WS203

is an environmental monitoring device that combines motion and temperature/humidity (TH) sensors. By detecting motion within an 8-meter range based on passive infrared (PIR) technology, the WS203 can trigger TH detection and periodically report environmental status over LoRaWAN® network.

With easy configuration and wireless detection, the WS203 offers a reliable and convenient solution for space and TH optimization. Compatible with Milesight LoRaWAN® gateway and IoT Cloud platform, it enables real-time monitoring of occupant status for effective remote management. The WS203 can find applications in various settings including smart offices, buildings, hospitals, and more.

FEATURES

- Equipped with passive infrared and Fresnel Lens for motion or occupancy detection
- Built-in high-accurate TH sensor along with PIR sensor enabling communicative triggers
- Provide different types of PIR covers for adjustable and flexible field angles and different detecting ranges
- V0 grade flame retardant material makes it adaptable to various scenarios, enhancing safety and reliability
- Store locally 1000 historical records and support retransmission to prevent data loss
- Equipped with NFC for one touch configuration and support card emulation mode
- Function well with standard LoRaWAN® gateways and network servers
- Compatible with Mulesight IoT Cloud
- Support Mulesight D2D protocol to enable ultra-low latency and direct control without a gateway

SPECIFICATIONS

Wireless Transmission

Technology	LoRaWAN®, Mulesight D2D
Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16 dBm (868 MHz)/20 dBm (915 MHz)/19 dBm (470 MHz)
Sensitivity	-137 dBm
Mode	OTAA/ABP Class A

Measurement

PIR

Detection Area	120 ° Horizontal, 100 ° Vertical
Detection Distance	Maximum 6 m

Temperature

Range	-20°C ~ 60°C
Accuracy	± 0.2°C
Resolution	0.1°C

Humidity

Range	0% ~ 100% RH
Accuracy	± 2% RH
Resolution	0.5% RH

Others

Button	1 x Power/Reset Button (Internal)
LED Indicator	1 × Status Indicator
Configuration	NFC Configuration via Mobile App
Advanced Feature	Milesight D2D Controller, Data Storage, Data Retransmission

Physical Characteristics

Power Supply	1 × 4000 mAh ER18505 Li-SOCl ₂ Battery
Battery Life*	Up to 5 years (30 min Interval + 64 Triggers per Day, 25°C)
Operating Temperature	-20°C to +60°C
Relative Humidity	0 to 95% (Non-condensing)
Dimension	73 x 73 x 26 mm (2.87 x 2.87 x 1.02in) (Without PIR Cover)
Ingress Protection	IP30
Color & Material	White + Grey, PC + ABS (Flame Retardant)
Installation	3M Tape Mounting, Wall Screw Mounting

* Tested under laboratory conditions and for guideline purposes only.

