Radar Fall Detection Sensor

Featuring LoRaWAN®

VS373

VS373 is a Radar Fall Detection Sensor[1] that adopts a Millimeter Wave Radar to capture falling. It provides non-contact person detection through point cloud data and realizes fall alarms. With a fall detection accuracy rate of up to 99%, it ensures the safety of users.

As a Milesight D2D controller & agent, the VS373 seamlessly communicates with other Milesight D2D devices, establishing more connections and paving the way for smoother operations. It can also be linked with alarm switch to notify the relevant personnel to take emergency measures.

With easy configuration and wireless detection, VS373 can be integrated with the Milesight LoRaWAN® gateway and Milesight Development Platform, enabling remote and visual management of all sensor data.

VS373 can be used in living rooms, bathrooms, bedrooms, kitchens, hospital wards, care homes, and other spaces where falls may occur.

◆ Features

- Equipped with Millimeter Wave Radar, it can overcome the adverse effects of light and water mist, which make it able to penetrate some obstacles
- Equipped with a millimeter-wave MIMO array antenna (24 Transmitters & 22 Receivers), it can provide higher precision and reliability
- Support continuous 24-hour detection and management capabilities, it does not rely on visible

light and can operate stably both day and night

- Support fall detection with a 99% fall capture rate and less than 1% false alarm rate[2]
- Support to add sub region for independent occupancy detection
- Support in-bed detection, leaving the bed within the scheduling time will trigger an alarm
- 100% privacy protection, no images will be captured
- Support on-site alarms of buzzer and LED indicator and provide backend reporting of alarm information, enabling timely notification of any emergency
- Store locally historical records and support retransmission to prevent data loss
- Compliant with standard LoRaWAN® gateways and network servers
- Support Milesight D2D protocol to enable ultra-low latency and direct control without gateways
- Support management via Milesight Development Platform

◆ Specifications

Fall Detection[3]	
Technology	Millimeter Wave Radar
Recognition Rate[2]	Up to 99% (Single Person)
False Alarm Rate[2]	Down to 1% (Default fall configuration parameters)
Installation Height	2.3m～3m
Advanced Feature	Milesight D2D Controller & Agent, Occupancy Detection, In-Bed Detection, Motionless Detection, Data Storage (1, 000 entries), Data Transmission, Data Retrievability
Radar	
Transceiver	24 Transmitters & 22 Receivers
Frequency	60GHz
Tx Power	Max. 20 dBm
FoV	70 ° Horizontal, 140 ° Vertical
Detection Range	4m*5m (Within the installation height)
Wireless Transmission	
Protocol	LoRaWAN®, Milesight D2D
Antenna	Internal Antenna
Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16 dBm (868 MHz)/22 dBm (915MHz)/19 dBm (470MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class C

Other Interfaces	
Wi-Fi	IEEE 802.11 b/g/n, 2.4GHz (AP Mode for Configuration)
DI/DO	1 × DO (60V/1A)
Button	1 × Reset Button,1 × Multi-function Button
LED Indicators	1 × Multi-color LED Indicator
Buzzer	1 × Buzzer
Power Input	1 × Type-C Cable (2m)
Physical Characteristics	
Power Supply	DC 5V/ 3A by Type-C Cable
Power Consumption	Max: 9.5W
Operating Temperature	0°C ~ 50°C
Relative Humidity	0 ~ 95% (non-condensing)
Dimension	114 × 84 × 15 mm (4.49 × 3.3 × 0.59 in)
Weight	214.5g
Ingress Protection	IP65
Housing&Color	ABS (UL94 V1), White
Installation	Ceiling Mounting
Approvals	
Regulatory	CE

[1]: This product is intended only as an auxiliary tool and cannot fully replace manual monitoring or personal companionship. For details please refer to Disclaimer and Important Information.

[2]: Installation under single-person scenario, non-narrow space, no strongly reflective objects (such as glass, mirrors, large areas of metal), no moving objects (such as fans, pets, robot vacuums); and correctly installed according to the steps in the guide.

[3]: The part of the data are all derived from laboratory conditions, and there may be deviations in actual use due to changes in the objective environment.

◆ Dimensions (mm)