

DHI-ARD2231-W2

Wireless Dual-Tech Detector



System Overview

Wireless Dual-Tech Detector is an indoor detector that detects human motion. Using passive IR and microwave detection technologies, the device detects the movement of persons and senses when they have entered the detection area. Through these technologies, false detections caused by thermal interference are also greatly reduced. The device is easy to install and use, and can be directly configured on the app.

Technical Specification

Function

Indicator Light	1 × green alarm indicator
Button	1 × power switch
Remote Update	Cloud update
Low Battery Detection	Yes
Tamper	Yes
Measuring Range (Temperature)	Indoor: -15 °C to +65 °C (+5 °F to +149 °F)
Measuring Accuracy	±1 °C (±1.8 °F)

Technical

Sensor	Dual-element low-noise PIR sensor, microwave sensor
Detection Mode	PIR + Microwave
Sensitivity	3 levels adjustable
Detection Range	12 m (39.37 ft) (90°) with installation height of 2.2 m (7.21 ft)
Detection Speed	0.3 m/s–3 m/s (0.98 ft/s–9.84 ft/s)
Microwave Frequency	24 G
Pet Immunity Level	≤ 18 kg (39.68 lb), height < 50 cm (19.68 ft)
White Light Resistance Level	2000 lux
Two-way Digital Temperature Compensation	Yes, no attenuation of detection distance in high temperature.

- Pet immunity function.
- Auto temperature compensation.
- 3-level sensitivity adjustment.
- Displays the temperature of the surrounding environment and supports the overheating alarm.
- Frequency hopping and two-way communication technology ensure that communication is stable.
- Supports cloud update and automatically restores when cloud update fails.
- PIR and microwave motion detection.
- Supports jamming detection and communication encryption.

Test Mode	Yes
Operating Current	11 uA
Alarm Current	69 mA

Wireless

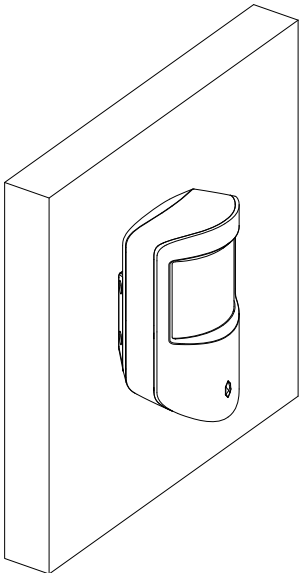
Carrier Frequency	433.1 MHz–434.6 MHz
Transmitter Power (EIRP)	Limit 10 mW
Communication Mechanism	Two-way
Communication Distance	Up to 1,200 m (3937.01 ft) in an open space
Encryption Mode	AES128
Frequency Hopping	Yes

General

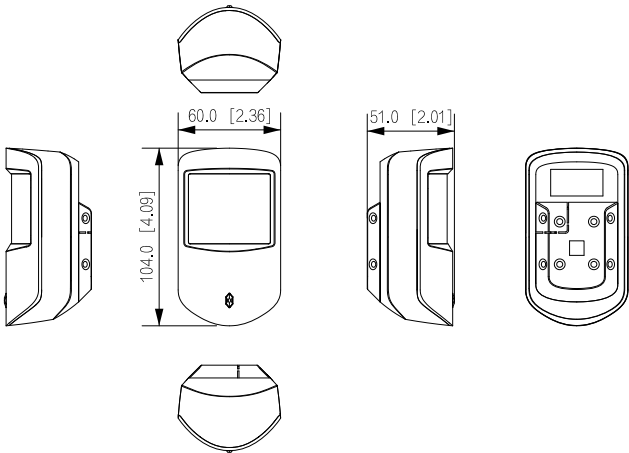
Power Supply	CR123A × 1
Battery Life	3 years (If triggered 10 times a day with a battery efficiency of 70%)
Power Consumption	Max. 640 mW
Operating Temperature	Indoor: -10 °C to +55 °C (+14 °F to +131 °F) Certified temperature: -10 °C to +40 °C (+14 °F to +104 °F)
Operating Humidity	10%–90% (RH)
Product Dimensions	104.0 mm × 60.0 mm × 50.0 mm (4.09" × 2.36" × 1.97")
Packaging Dimensions	135.0 mm × 98.5 mm × 56.8 mm (5.31" × 3.88" × 2.24")
Net Weight	106 g (0.23 lb)
Gross Weight	184 g (0.41 lb)
Installation	Wall mount, Ceiling mount (With the bracket ARA33)
Casing Material	PC + ABS
Certifications	CE FCC

Ordering Information		
Type	Part Number	Description
Wireless Dual-Tech Detector	DHI-ARD2231-W2	Wireless Dual-Tech Detector

Installation



Dimensions (mm[inch])



Application

