

DH-PFR3Q-F10-FC

Fall Detection Assisted Care Sensor (Ceiling mount)



Series Overview

The Fall Detection Assisted Care Sensor is a millimeter-wave radar that performs fall detection and tracking based on FMCW technology, enhanced with MIMO and Beamforming. Utilizing deep learning algorithms and auto-tracking technology, it enables non-contact detection of human posture, movement speed, and body position to accurately identify falls. It is specially designed for sensitive environments, making it ideal for bedrooms, bathrooms, and other indoor spaces, delivering real-time monitoring without compromising personal privacy. Easy to install and maintain, it can be used in homes, elderly care communities, and medical institutions to enhance safety and emergency response.

Scene

It can be used in medical, elderly caring and the judiciary industry to perform monitoring.

Technical Specification

Function

People in Room Detection	Yes
Fall Detection	Yes
Default	One-click reset default settings
Indicator Light	Indicator light (red, yellow and green)

Performance

Detection Distance	0.5 m–5 m (1.64 ft–16.4 ft)
Detection Angle	Horizontal: 120°, pitch: 60°
Modulation Method	FMCW modulation method
Working Frequency	Millimeter wave band
Working Frequency band	60 GHz–64 GHz
Scanning Frequency	20 Hz
Transmission Power	≤10 dBm (50 mW)

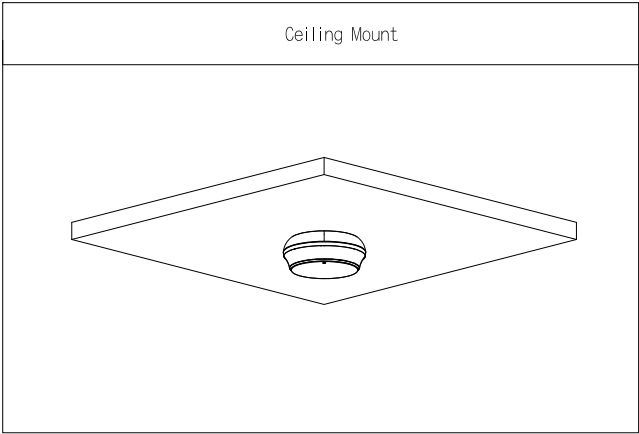
- Includes a strong millimeter-wave radar, MTI dynamic target detection technology and advanced algorithms.
- Non-contact detection that makes it convenient to use while it protects your privacy.
- Detects the posture of people as they fall in real time and quickly triggers alarms, sending critical information.
- Supports wired, Wi-Fi, and RS-485 communication, and it can be connected to the platform.
- Low energy consumption during signal transmission, allowing it to meet the requirements of indoor radio communication.
- Supports ceiling mount installation, and is lightweight, making it fast and easy to install.

Range Resolution	8 cm (3.15")
Network & Port	
Network Port	External RJ-45 network port; It supports transmitting data at 10/100 Mbps
Network Protocol	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Wi-Fi	Yes
Wi-Fi Standard	IEEE 802.11B/G/N
Wi-Fi Frequency Range	2.4 GHz
Wi-Fi Transmission Rate	100 Mbps
User Management	Management of permissions for multiple users.
SDK and API	Yes
Browser	IE: IE7 and later versions
User/Host	20
RS-485	1 (baud rate range: 1,200 bps–115,200 bps)
Alarm	
Alarm Output	1 channel (the wet node can support up to 12 VDC and 0.3 A)
Alarm Event	Fall alarm, network disconnection, IP conflict, scene change, radar alarm, unauthorized access; Alarm can be set based on the detection of presence or absence of people.
Power	
Power Supply	12 VDC ± 30%
ePoE	No
Power Consumption	≤3.2 W
Protection	
Protection	IP67

Electrostatic Discharge	Contact discharge: 7k; Air discharge: 9k
Surge Protection Grade	Common mode: ±2 kV; 91 Differential mode: ±1 kV
Structure	
Appearance Color	White
Casing Material	PC
Installation	Ceiling mount
Product Dimensions	φ92 mm × 36 mm (φ3.62" × 1.42")
Packaging Dimensions	147 mm × 145 mm × 88 mm (5.79" × 5.71" × 3.46") (L × W × H)
Packaging Method	36 in one package
Net Weight	0.17 kg (0.37 lb)
Gross Weight	0.32 kg (0.71 lb)
Installation Height	Ceiling mount: 2 m–3 m (6.56 ft–9.84 ft)
Environment	
Operating Temperature	−40 °C to +70 °C (−40 °F to +158 °F)
Operating Humidity	≤95% (RH)
Storage Temperature	−40 °C to +70 °C (−40 °F to +158 °F)
Storage Humidity	≤95% (RH)
Anti-corrosion Level	Basic protection
Certifications	
Certifications	CE

Ordering Information		
Type	Model	Description
Assisted Care Sensor	DH-PFR3Q-F10-FC	Fall Detection Assisted Care Sensor (Ceiling mount)

Installation



Dimensions (mm[inch])

