

DH-PFR3Q-F5-HC

Vital Signs Assisted Care Sensor (Ceiling mount)



Series Overview

Vital Signs Assisted Care Sensor utilizes advanced millimeter-wave FMCW radar technology, enhanced with MTI, MTD, and STFT algorithms, to accurately detect vital signs such as heart rate and respiratory rate. It offers non-contact monitoring, providing real-time data on individuals, including their heart rates, respiratory rates, and bed occupancy status. When abnormal readings are detected, alarms are automatically triggered, allowing caregivers to respond promptly to those in their care. Easy to install and maintain, the radar can be mounted above beds and operates autonomously without manual supervision. It is ideal for seniors living alone, patients requiring continuous care, and other vulnerable individuals, enhancing their overall safety and quality of care. Applicable across the healthcare, elderly care, and smart home industries, the Vital Signs Monitoring Radar significantly improves both monitoring efficiency and the wellbeing of those cared for.

Scene

Specially designed for the medical and elderly care industries to monitor heart rates.

Technical Specification

Function

Heart Rate Monitoring	Yes
Breathing Monitoring	Yes
In Bed Detection/Out of Bed Detection	Yes
Default	One-click reset default settings
Indicator Light	Indicator light (red, yellow and green)

Performance

Detection Distance	0.1 m–3 m (0.33 ft–9.84 ft)
Detection Angle	Horizontal: 120°, pitch: 60°
Detection Range	2 m × 2 m (6.56 ft × 6.56 ft)

- 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.
- Monitors the heart rate of people in real time, quickly sending notifications with 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.

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)
Range Resolution	4 cm (1.57")

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)

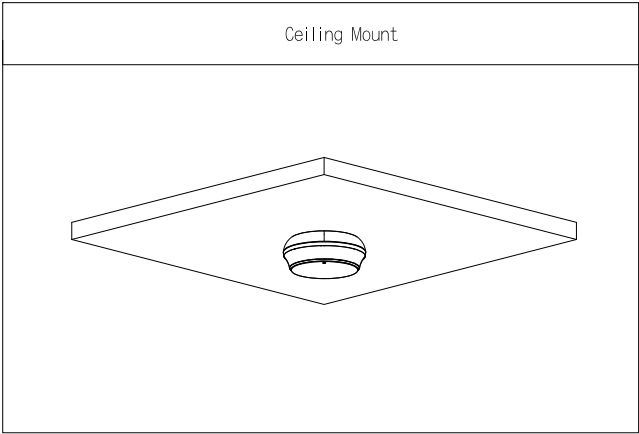
Alarm

Alarm Output	1 channel (the wet node can support up to 12 VDC and 0.3 A)
Alarm Event	Abnormal breathing alarm, abnormal heart rate alarm, on bed and off bed alarm, network disconnection, IP conflict, scene change, unauthorized access

Power	
Power Supply	12 VDC ± 30%
ePoE	No
Power Consumption	≤3 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: 0.6m–2.5m(1.97ft–8.2ft)
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
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Installation



Dimensions (mm[inch])

