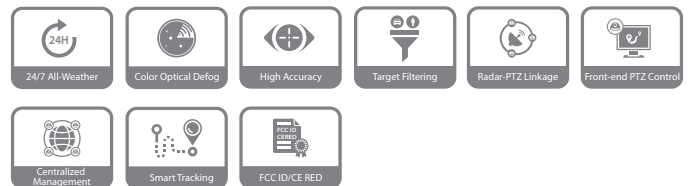


DH-PFR4K-E50

50m Security Radar



- 24/7 all-weather
- Wide-range detection
- High accuracy
- Target filtering
- Radar-PTZ linkage
- Front-end PTZ control
- Centralized management
- Smart tracking
- IP67/IK09
- FCC ID/CE RED



System Overview

Adopt 24 GHz radar chip for 24/7 all-weather high-accuracy detection in the range of 50 m/120°. Support radar-PTZ smart tracking, compatible with common Dahua speed domes. With radar detection and intelligent algorithms, ultra-low false positives and zero false negatives are achieved around the clock. Multiple PTZ cameras can be linked to one radar, and wide range global arming and detail tracking is realized simultaneously. The product is widely applied to various perimeter and intrusion arming sites such as villas, warehouses, prisons, airports, and oilfields to provide users with safer and more valuable security protection solutions.

Functions

K-band Detection

Adopt 24 GHz radar chip for detection with long distance, high accuracy, wide range, and 24/7 all weathers to realize ultra-low false positives and zero false negatives in armed regions.

Radar+PTZ Smart Tracking

Support linkage between radar and common Dahua speed domes. Multiple speed domes can be linked with one radar (link up to 3 speed domes on web manager, and up to 8 on platform). Both radar and cameras can be installed separately.

Multi Level Perimeter Protection

Support region setting with different alarm priority, external alarm linkage, human and vehicle filtering, and vehicle detection with low and medium speed.

Front-end PTZ Control

Low delay with radar directly controlling camera tracking. Display radar-PTZ linkage on web manager, and one radar can link with multiple cameras. Video stream acquisition, and map and trajectory display on NVR or platform is also supported.

Intelligent Algorithm of Radar

Intelligent algorithm is used to identify complex scenes and achieve high accuracy in different scenarios. Alarm is triggered once radar detection range is covered or radar is rotated substantially. Support human and vehicle recognition.

Centralized Platform Management

Support radar configurations and management of multiple radars on platforms. Display radar-PTZ smart tracking on the map.

Ingress Protection and Certifications

Meet IP67 and IK09 ingress protection, and FCC ID and CE RED standards.

Technical Specification		Port	
Performance		Alarm Input	1 channel (support 5V DC potential and 5mA current)
Max. Target Number	64	Alarm Output	4 channels (wet contact; support max 12V DC potential and max 300mA current) 1 channel (dry contact; support max 30V DC potential and max 2A current, and max 250V AC potential and max 2A current)
Detection Distance	50.0 m (164.04 ft)	Alarm Linkage	Snapshots, radar-PTZ linkage, SD card record, alarm triggering output, and email sending
Detection Angle	Horizontal: 120° Vertical: 36°	Alarm Event	Radar alarm, scene changing, no SD card, SD card capacity warning, SD card error, network disconnection, IP conflict, full disk, and illegal access
Max. Detection Speed	40 km/h, continuous trajectory	SD Card	Yes
Min. Detection Speed	0.17 m/s, continuous trajectory	Indicator Light	Network connection:Yellow Running status: Red/Green Power: Green
Distance Accuracy	± 1 m (± 3.28 ft)	Power	
Angle Accuracy	± 1°	Power Supply	DC 12V (±30%), AC 24V (±30%), PoE (802.3at)
Max. Area Number	10	Power Consumption	Basic: 10W Max.: 12W
Modulation Type	FMCW	Environment	
Scan Frequency	10 Hz	Operating Temperature	−40°C to +70°C (−40°F to +158°F)
Operating Frequency	24.05–24.25 GHz	Operating Humidity	≤95% (RH)
Transmission Power	<20dBm (100mW)	Storage Temperature	−40°C to +80°C (−40°F to +176°F)
Detection Target Type	Human and vehicle	Storage Humidity	≤95% (RH)
Function		Ingress Protection	IP67/IK09
Radar+PTZ Smart Tracking	Supported on web manager	ESD	Contact discharge: 6k Air discharge: 8k
Track Mode	Tour, distance priority, and time priority	Surge Protection Grade	Common mode: ± 6kV Differential Mode: ± 2kV
Region Setting	Alarm area, pre-warning area, and shield area	Structure	
Environment Mode	General, shrub, and capacious	Color	White
Target Filtering	Human and vehicle filtering	Casing	ADC12+PC
Channel Selections	Yes	Product Dimensions	204.9 × 157.9 × 67.1 mm (8.07" × 6.22" × 2.64")
Record Mode	Manual record, scheduled record, and alarm record Record priority: Manual>Alarm>Scheduled	Packaging Dimensions	256.0 × 208.0 × 171.0 mm (10.08"× 8.19" × 6.73")
Restore Default Settings	Restore default settings with one click	Net Weight	1.7 kg (2.20 lb)
Security Mode	Authorized user name and password, MAC address binding, HTTPS encryption, IEEE 802.1x, and network access control	Gross Weight	2.2 kg (4.85 lb)
Power Output	Support 12 V DC power output with maximum 165mA current and 12 V voltage	Installation Method	Wall-mounted, ceiling-mounted, pole-mounted
Map Encoding	Yes	Installation Height	2.0 m to 4.0 m (3.0 m recommended) (6.56 ft to 13.12 ft) (9.84 ft recommended)
Network		Installation Position	Install separately
Ethernet	RJ-45 (10Base-T/100Base-TX)	Certification	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour, and 802.1x	Certifications	
Interoperability	ONVIF Profile S&G, CGI	CE:EN 50385; EN 55032; EN 55024; EN 55035; EN 50130-4; ETSI EN 301 489-1; ETSI EN 301 489-3; EN 60950-1 CE RED: EN 300440 FCC: FCC Part 15 Subpart B: 2018; ANSI C63.4: 2014 FCC ID: FCC 47 CFR Part 15C	
User/Host	19		
Storage	NAS; local PC; micro SD card (256 G)		
Browser	IE: Versions later than IE7 Google: Versions earlier than Chrome45 Firefox: Versions earlier than Firefox46		
Matched Platform	SmartPSS, DSS		

Ordering Information		
Type	Part Number	Description
Radar	DH-PFR4K-E50	50 m security radar
Bracket	DH-PFB510W	Radar bracket, support wall-mounting and ceiling-mounting
	DH-PFA150	Pole mount bracket, support vertical or horizontal pole mounting
	DH-PFA151	Corner mount bracket
Power Adapter	DH-PFM320D-015	Power adapter, DC12V/1.5A

Accessories



DH-PFB510W
Radar bracket



DH-PFA150
Pole mount bracket

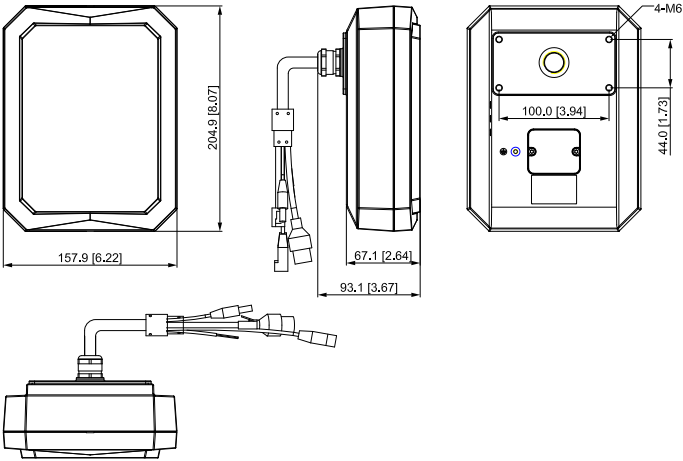


DH-PFA151
Corner mount bracket



DH-PFM320D-015
Power Adapter
DC12V/1.5A

Dimensions (mm/inch)



Package Information

- Radar × 1
- Waterproof connector for network cable × 1
- Allen wrench × 1
- Quick start guide × 1
- Quality certificate × 1
- Legal and regulatory information × 1
- QR code label ×1

Wall Mount	Ceiling Mount	Corner Mount
PFB510W	PFB510W	PFB510W+PFA151
Pole Mount	Pole Mount	
PFB510W+PFA150	PFB510W+PFA150	