DAHUA TECHNOLOGY

DH-PFR4K-B240
240 m Security Radar for Perimeter Protection

- 24/7 all-weather
- Crossing detection
- High accuracy
- Target filtering
- Radar-PTZ linkage
- Front-end PTZ control
- Centralized management
- Smart tracking
- IK10
- CE RED

Series Overview

This security radar adopts 24 GHz radar chip for 24/7 all-weather high-accuracy detection in the range of 240 m/20°. It supports radar-PTZ smart tracking, compatible with common Dahua PTZ cameras. With radar detection and intelligent crossing detection algorithms, ultra-low false alarms and zero missed alarms are achieved around the clock. Multiple PTZ cameras can be linked to one radar, and wide range global arming and detail tracking are realized simultaneously.

| 24/7 All-Weather | Crossing Detection | High Accuracy | Target Filtering | Radar-PTZ Linkage | Front-end PTZ Control |
| Centralized Management | Smart Tracking | CE RED | IK10 | | |

Functions

K-band Detection
Adopt 24 GHz radar chip for detection with long distance, high accuracy, and 24/7 all weathers to realize ultra-low false alarms and zero missed alarms in armed regions.

Crossing Detection
Adopting dahua intelligent radar algorithm, the radar integrates superior ability to detect targets crossing the radar defense zone laterally.

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
Support human and vehicle recognition.

Centralized Platform Management
Support configurations and management of multiple radars on the platform. Display radar-PTZ smart tracking on the map.

Protection and Certifications
IK10 protection grade, and CE RED standards.

Scene

The product is widely applied to various perimeter and intrusion arming sites such as farms, prisons, airports, and oilfields to provide users with safer and more valuable security protection solutions.

Technical Specification

Performance

Max. Target Number	32
Detection Distance	Radial 300 m (984.25 ft) (human, 0°) Cross 240 m (787.40 ft) (human, walking/running) Cross 150 m (492.12 ft) (human, crouch walking/crawling)
Detection Angle	Horizontal: 20° Vertical: 13°
Max. Detection Speed	Radial: 80 km/h Crossing: 36 km/h
Min. Detection Speed	0.18 km/h
Distance Accuracy	± 1.5 m (± 4.92 ft)
Angle Accuracy	± 1°
Max. Area Number	10
Modulation Type	FMCW
Scan Frequency	8 Hz
Operating Frequency	24 GHz
Detection Target Type	Human and vehicle

Function

Radar+PTZ Smart Tracking	Supported on web manager
Track Mode	Tour, distance priority, and time priority
Region Setting	Intrusion: Alarm area, pre-warning area, and shield area Tripwire: Alarm area
Target Filtering	Human and vehicle filtering
Record Mode	Manual record, scheduled record, and alarm record Record priority: Manual > Alarm > Scheduled
Restore Default Settings	Restore default settings with one click
Security Mode	Authorized user name and password, MAC address binding, HTTPS encryption, IEEE 802.1x, and network access control
Positioning	GPS, Glonass
Map Encoding	Yes

Network

Ethernet	RJ-45 (10 Base-T/100 Base-TX)
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
Interoperability	ONVIF Profile S&G, CGI
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	DSS Pro

Port

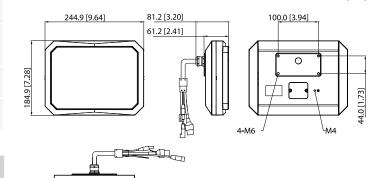|	
Alarm Input	1 channel (support 5V DC potential and 5mA current)
Alarm Output	5 channels (wet contact; support max 12V DC potential and max 300mA current)
Alarm Linkage	Snapshots, radar-PTZ linkage, SD card record, alarm triggering output, and email sending
Alarm Event	Radar alarm, no SD card, SD card capacity warning, SD card error, network disconnection, IP conflict, full disk, and illegal access
SD Card	Yes
Indicator Light	Network connection: Yellow Running status: Red/Green Power: Green

Power

Power Supply	12V DC (±30%), 24V AC (±30%), PoE (802.3at)
Power Consumption	Basic: 16 W Max.: 20 W

Environment

Operating Temperature	−40°C to +65°C (−40°F to +149°F)
Operating Humidity	≤95% (RH)
Storage Temperature	−40°C to +80°C (−40°F to +176°F)
Storage Humidity	≤ 95% (RH)
Ingress Protection	IK10
ESD	Contact discharge: 6k Air discharge: 8k
Surge Protection Grade	Common mode: ± 6kV Differential mode: ± 2kV

Structure

Color	White
Casing	ADC12+PC
Product Dimensions	244.9 mm × 184.9 mm × 61.2 mm (9.64" × 7.28" × 2.41")
Packaging Dimensions	328 mm × 146 mm × 278 mm (12.90" × 5.75" × 10.95")
Net Weight	2.84 kg (6.26 lb)
Gross Weight	3.40 kg (7.49 lb)
Installation Method	Wall mount; ceiling mount; pole mount
Installation Height	3.0 m to 5.0 m (3.0 m recommended) (9.84 ft to 16.40 ft) (9.84 ft recommended)
Installation Position	Separate or integrated installation

Certification

Certifications	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

Ordering Information

Type	Model	Description
240 m Perimeter Security Radar	DH-PFR4K-B240	240 m perimeter security radar
Accessories	PFB414W	Radar-PTZ Linkage bracket, supports integrated installation of multi-type radars and PTZ cameras
	PFB510W	Radar bracket, supports wall mount and ceiling mount
	PFA150	Pole mount bracket, supports vertical or horizontal pole mount

Dimensions (mm[inch])

244.9 [9.64]   81.2 [3.20]   100.0 [3.94]

61.2 [2.41]

184.9 [7.28]

44.0 [1.73]

4-M6   M4

Installation

PFB414W
Radar-PTZ Linkage
bracket

PFB510W
Radar bracket

PFA150
Pole mount
bracket

Integrated Installtion	Separate Installtion	
Wall mount	Ceiling mount	Wall mount
Vertical Pole Mount	Vertical Pole Mount	Horizontal Pole Mount