

# DH-PFR4K-E120

120 m Security Radar for Area Protection



- · 24/7 all-weather
- · Wide-range detection
- · High accuracy
- · Target filtering
- · Radar-PTZ linkage
- $\cdot$  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 120 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.

# Detector Series | DH-PFR4K-E120

### **Technical Specification**

#### Performance

Performance		
Max. Target Number	64	
Detection Distance	Human: 120.0 m (393.70 ft) Vehicle: 150.0 m (492.13 ft)	
Detection Angle	Horizontal: 120° Vertical: 26°	
Max. Detection Speed	40 km/h, continuous trajectory	
Min. Detection Speed	0.6km/h, continuous trajectory	
Distance Accuracy	± 1.5 m (± 4.92 ft)	
Angle Accuracy	± 1°	
Max. Area Number	10	
Modulation Type	FMCW	
Scan Frequency	10 Hz	
Operating Frequency	24 GHz	
Transmission Power	<20dBm (100mW)	
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	Alarm area, pre-warning area, and shield area	
Environment Mode	General, shrub, and capacious	
Target Filtering	Human and vehicle filtering	
Channel Selections	Yes	
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	
Power Output	Support 12 V DC power output with maximum 165mA current and 12 V voltage	
Map Encoding	Yes	
Network		
Ethernet	RJ-45 (10Base-T/100Base-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	

Port		
Alarm Input	1 channel (support 5V DC potential and 5mA current)	
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)	
Alarm Linkage	Snapshots, radar-PTZ linkage, SD card record, alarm triggering output, and email sending	
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	
SD Card	Yes	
Indicator Light	Network connection: Yellow Running status: Red/Green Power: Green	
Power		
Power Supply	DC 12V (±30%), AC 24V (±30%), PoE (802.3at)	
Power Consumption	Basic: 12W Max.: 14W	
Environment		
Operating Temperature	-40°C to +70°C (-40°F to +158°F)	
Operating Humidity	≤95% (RH)	
Storage Temperature	-40°C to +80°C (-40°F to +176°F)	
Storage Humidity	≤95% (RH)	
Ingress Protection	IP67/IK09	
ESD	Contact discharge: 6k Air discharge: 8k	
Surge Protection Grade	Common mode: ± 6kV Differential Mode: ± 2kV	
Structure		
Color	White	
Casing	ADC12+PC	
Product Dimensions	204.9 × 157.9 × 67.1 mm (8.07" × 6.22" × 2.64")	
Packaging Dimensions	256.0 × 208.0 × 171.0 mm (10.08"× 8.19" × 6.73")	
Net Weight	1.7 kg (2.20 lb)	
Gross Weight	2.2 kg (4.85 lb)	
Installation Method	Wall-mounted, ceiling-mounted, pole-mounted	
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 FCC: FCC Part 15 Subpart B: 2018; ANSI C63.4: 2014 FCC ID: FCC 47 CFR Part 15C	

## Detector Series | DH-PFR4K-E120

#### **Ordering Information**

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Туре	Model	Description
Radar	DH-PFR4K-E120	120 m security radar
	PFB414W	Radar-PTZ Linkage bracket, supports integrated installation of multi-type radars and PTZ cameras
Bracket	PFB510W	Radar bracket, supports wall- mounting and ceiling-mounting
	PFA150	Pole mount bracket, supports vertical or horizontal pole mounting

### Accessories



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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	

### Dimensions (mm/inch)



