

Multi-sensor Panoramic Dome Camera

4 x 2 MP Multi-sensor Panoramic Network IR Dome Camera



System Overview

The multi-sensor camera provides added flexibility for capturing wide area video surveillance. With four (4) 2 MP sensors working in tandem to create a comprehensive 180° overview, the camera can replace multiple single-sensor cameras providing a higher return on investment. The multi-sensor camera features contrast, backlight compensation, white balance, and resolution control to create a crystal-clear image even in the most challenging lighting conditions. Plus, with IP67 and IK10 ratings, the camera is ready for any application.

Functions

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing details in low light down to 0.007 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

Intelligent Business Analysis

The built-in IVS features heat map and E-PTZ functionality, advanced features that add business intelligence to your security system. Intelligent Analysis tracks and stores daily, weekly, monthly, and yearly people flow through a defined scene and produces a configurable report. The system uses this data to produce a Heat Map, a two-dimensional representation of data that provides an immediate visual summary of information. The E-PTZ feature scans a portion of the panoramic scene and zooms that scene for improved observation.

- Four (4) 1/2.8-in. 2 MP Progressive Scan STARVIS[™] CMOS Imagers
- Triple-stream Encoding with Smart H.265+ Compression
- Maximum Resolution: 4096 x 1800 at 25 fps
- Starlight Technology for Ultra-low Light Sensitivity
- Supports 180° Panoramic View
- Day/Night (ICR), 3DNR, AWB, AGC, BLC
- Intelligent Video System
- Maximum IR LED Distance 30 m (98 ft)
- ArcticPro Series Camera Operational down to -40° C (-40° F)
- IP67 Ingress Protection and IK10 Vandal Resistance
- PoE+ Support



True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of the camera's infrared LEDs to compensate for the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high-performance in extreme low-light environments up to 30 m (98 ft).

ArcticPro

The Dahua ArcticPro Series of extreme-environment cameras combine temperature-tolerant components with a waterproof enclosure to ensure flawless operation in temperatures as low as -40° F (-40° C) without the need for an internal heater. The lack of a heater reduces the camera's power consumption and saves operating costs. For applications that demand high-resolution video with advanced features in extremely cold environments, the Dahua ArcticPro Series offers a camera to satisfy the most demanding requirements.

Environmental

The camera complies with the IK10 impact rating making it capable of withstanding the equivalent of 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in.). Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.



Technical Specification

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Day/Night

BLC Mode

Camera				
Image Sensor		Four (4) 1/2.8-in. 2 MP STARVIS™ CMOS Sensors		
Effective Pixels		4096(H) x 1800(V)		
RAM/ROM		1024 N	/IB / 128 MB	
Scanning System		Progre	ssive	
Electronic Shutter Speed		Auto, Manual: 1/3 s to 1/100,000 s		
Minimum Illumination		Color: 0.007 lux at F2.0 (1/3 s, 30 IRE) Color: 0.05 lux at F2.0 (1/30 s, 30 IRE) 0 lux at F2.0 with IR on		
S/N Ratio		More than 50 dB		
IR Distance		Up to 30.0 m (98.43 ft)		
IR On/Off Control		Auto, N	Manual	
IR LEDs		Six (6)		
Lens				
Lens Type		Fixed		
Mount Type		Board-in		
Focal Length		3.0 mn	n	
Max. Aperture		F2.0		
Angle of View		Horizontal: 180° Vertical: 80°		
Focus Control		Fixed		
DORI Distance ¹				
Detect (8 ppf)	Observe (19 ppf)		Recognize (38 ppf)	Identify (76 ppf)
41 m (135 ft)	16 m (53 ft)		8 m (26 ft)	4 m (13 ft)
Pan/Tilt/Rotati	on			
P. Range Ti		Pan: 0° to 355° Tilt: 0° to 75° Rotation: ±20°		
Video				
Compression		Smart H.265+, H.265, Smart H.264+, H.264, MJPEG		
Streaming Capability		Three (3) Streams		
Resolution		4096 x 1800, 3840 x 1680, 2880 x 1264, 1920 x 832, 1280 x 560, 1024 x 452		
Frame Rate		Main Stream: 4096 x 1800 at 25 fps		
		Sub Stream 1: 1024 x 452 at 30 fps		
		Sub Stream 2: 1920 x 832 at 30 fps		
Bit Rate Control		CBR, VBR		
Bit Rate		H.265: 9 Kbps to 9472 Kbps H.264: 24 Kbps to 15616 Kbps		

White Balance	Auto, Natural, Street Lamp, Outdoor, Manual
Gain Control	Auto, Manual
Noise Reduction	3D DNR
Motion Detection	Off, On (4 Zone, Rectangle)
Region of Interest	Off, On (4 Zone)
Smart IR	Support
Digital Zoom	16x
Privacy Masking	Off, On (4 Area, Rectangle)
Audio	
Compression	G.711a, G.711Mu, AAC, G.726
Network	
Ethernet	RJ-45 (100/1000 Base-T)
Protocol	HTTP, HTTPs, TCP, ARP, RTSP, RTP, UDP, SMTP, FTP, DHCP, DNS, DDNS, PPPOE, IPv4/v6, QoS, UPnP, NTP, Bonjour, 802.1x, Multicast, ICMP, IGMP, SNMP
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast, Multicast
Maximum User Access	10 Users / 20 Users
Edge Storage	NAS Local PC for instant recording Micro SD Card, maximum 128 GB
Web Viewer	IE, Firefox, Safari
Management Software	Smart PSS, DSS
Mobile Operating System	IOS, Android
Certifications	
Safety	EN 60950:2000 UL60950-1
Electromagnetic Compatibility (EMC)	FCC Part 15 Subpart B
Interface	
Video	One (1) Port (use for adjustment only)
Audio	Input: One (1) Channel, RCA Output: One (1) Channel, RCA
Alarm	Input: Two (2) Channels (5 VDC, 5 mA) Output: Two (2) Channels (30 VDC, 1 A; 50 VAC, 0.5 A)
Electrical	
Power Supply	24 VAC or PoE+ (802.3at Class 4), 1.5 A
Power Consumption	25.5 W, maximum

1. The DORI distance is a measure of the general proximity for a specific classification to help pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specifications and lab test results according to EN 62676-4, the standard that defines the criteria for the Detect, Observe, Recognize and Identify classifications.

H.264: 24 Kbps to 15616 Kbps

Auto (ICR), Color, B/W BLC, HLC, DWDR

Ultra Series | DH-IPC-PDBW8800N-A180

Environmer	ntal			
Operating Cond	ditions	-40° C to +60° C (-40° F to +140° F) Less than 95% RH		
Storage Conditi	ions	-40° C to + Less than	+60° C (-40° F to +140° F) 95% RH	
Ingress Protect	ion	IP67		
Vandal Resistar	nce	IK10		
Constructio	Construction			
Casing	Casing		Metal	
Dimensions		ø212.0 mi	m x 169.50 mm (ø8.35 in. x 6.67 in.)	
Net Weight		3.60 kg (7.90 lb)		
Gross Weight		4.60 kg (10.10 lb)		
Intelligence				
IVS triggers an alarm and takes a defined action for the following events:				
Standard Features		 Tampering with the camera. Camera loses or changes focus drastically. Error writing to an onboard Micro SD card. Error sending or receiving data over the network. Unauthorized access to the camera. 		
Premium Featu	Premium Features			
Motion An		An object moves through any part of the scene.		
Tripwire	Tripwire A target crosses		ses a user-defined line.	
Intrusion		A target ente	ers or exits a defined perimeter.	
Scene Chang	70	A person or object moves the camera to change th or covers the camera to obscure the scene.		
Abandoned/ Object			es an object in designated area, or a target object from the same designated area.	
Advanced Features				
Heat Map		Generates a visual representation of data.		
E-PTZ		Scans a portion of the panoramic scene and zooms that scene for improved observation.		
Ordering Information				
Туре	Part Number		Description	

Туре	Part Number	Description
4 x 2 MP Camera	DH-IPC-PDBW8800N-A180	Four (4) x 2 MP Multi-sensor Panoramic Network IR Dome Camera, IVS
Accessories, Included	PFA111	Mount Adapter
Accessories, Optional	PFA120	Junction Box
	PFA140	Power Box
	PFA150	Pole Mount
	PFA151	Corner Mount
	PFB300C	Ceiling Mount
	PFB303S	Parapet Mount
	PFB303W	Wall Mount

Accessories

Included:



PFA111 Mount Adapter **Optional:**







PFA120

Junction Box

PFA140 Power box

PFB300C Ceiling Mount

PFA151

Corner Mount





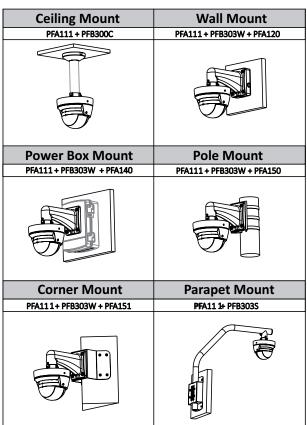
PFB303S

Parapet Mount

PFA150 Pole Mount



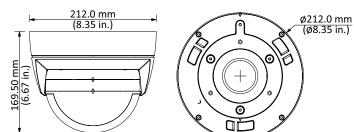
Wall Mount





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Dimensions (mm/inch)





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