

12 MP Vari-focal Dome Network Camera

12 MP IR Dome Network Camera



System Overview

The 12 MP day/night dome network camera features an advanced 1/1.7-in progressive-scan CMOS Sony STARVIS™ imager with a motorized zoom lens. The camera uses the Smart H.265+ video compression standard to improve encoding efficiency while preserving high-quality video, and the camera also features built-in business intelligence algorithms. The IP67 environmental protection rating and the IK10 vandal resistance ensure the camera operates in the harshest environments.

Functions

4K Technology

4K resolution is a revolutionary breakthrough in image processing technology. 4K delivers four times the resolution of standard HDTV 1080p cameras and offers superior picture quality and image details. 4K resolution improves the clarity of a magnified scene to view or record crisp forensic video from large areas.

Electronic Pan/Tilt/Zoom (E-PTZ) Functionality

The E-PTZ feature scans a portion of the scene and zooms that scene for improved observation. E-PTZ coupled with ultra-high resolution lets an operator monitor a large area from a single camera, reducing overall security costs.

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. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

- 1/1.7-in. 12 MP Progressive Scan STARVIS™ CMOS Sensor
- Triple-stream Encoding
- Smart H.265+ and H.264 Dual Codecs
- 12 MP (4000 x 3000) at 20 fps and 4K (3840 x 2160) at 30 fps
- Digital WDR and True Day/Night (ICR)
- 4.1 mm to 16.4 mm Motorized Lens
- Maximum IR LED Distance 50 m (164 ft)
- ArcticPro Series Camera Operational down to -40° C (-40° F)
- IP67 Ingress Protection and IK10 Vandal Resistance
- Supports PoE+

4K

• Intelligent Video System with Intelligent Business Analysis

Five-year Warranty*



Intelligent Business Analysis

The built-in IVS features people counting and heat map 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. People Counting and Heat Maps can identify the most active areas of a retail space providing valuable data analysis for commercial applications.

Smart Scene Adaptive (SSA) Technology

Smart Scene Adaptive (SSA) is an intelligent image technology, developed by Dahua that automatically evaluates and compensates for changes in the luminance of a scene. SSA automatically regulates the exposure parameters to improve image quality in a backlit scene, especially in scenes with traffic lights or headlights.

ArcticPro

The Dahua ArcticPro Series of extreme-environment cameras combine temperature-tolerant components, a waterproof enclosure, and an integrated heater to ensure flawless operation in temperatures as low as -40° C (-40° F). 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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1/1.7-in. 12 MP STARVIS™ CMOS
4000(H) x 3000(V)
1024 MB / 128 MB
Progressive
Color: 0.02 Lux at F1.53, 0 Lux at F1.53 with IR on
More than 50 dB
Distance up to 50 m (164.04 ft)
Auto, Manual
Three (3)
Motorized Auto Iris (HALL)
Board-in
4.1 mm to 16.4 mm Motorized
F1.53
Horizontal: 105° to 35° Vertical: 77° to 26°
4x
44
Motorized

DORI¹ Distance

Lens	Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
Wide	115 m (377 ft)	46 m (151 ft)	23 m (75 ft)	11 m (36 ft)
Tele	227 m (909 ft)	111 m (364 ft)	55 m (180 ft)	28 m (92 ft)

Pan:0° to 355° Tilt: 0° to 65° Rotation: 0° to 355°

Pan/Tilt/Rotation

Range		

CompressionSmart H.265+, H.265, Smart H.264+, H.264, MJPEGStreaming CapabilityThree (3) StreamsResolution12 MP (4000 x 3000), 4K (3840 x 2160), 6 MP (3072 x 2048), 5 MP (2560 x 1920), 300P (1920 x 1030), 13 MP (1280 x 950), 200P (1280 x 720), D1 (704 x 480), VGA (640 x 480), CIF (342 x 240)Frame RateMain Stream: 12 MP at 20 fps or 4K at 30 fpsFrame RateSub Stream: D1 at 30 fpsBit Rate ControlCBR, VBRBit RateH.264: 24 to 16384 Kbps H.265: 14 to 9984 Kbps	Video	
Resolution 12 MP (4000 x 3000), 4K (3840 x 2160), 6 MP (3072 x 2048), 5 MP (2560 x 1920), 3 MP (2048 x 1536), 3 MP (2304 x 1296), 1080p (1920 x 1080), 1.3 MP (1280 x 960), 720p (1280 x 720), D1 (704 x 480), VGA (640 x 480), CIF (342 x 240) Frame Rate Main Stream: 12 MP at 20 fps or 4K at 30 fps Bit Rate Control CBR, VBR Bit Rate H.264: 24 to 16384 Kbps	Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
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Frame Rate Sub Stream: D1 at 30 fps Third Stream: 1080p at 30 fps Bit Rate Control CBR, VBR Rit Rate H.264: 24 to 16384 Kbps	Resolution	6 MP (3072 x 2048), 5 MP (2560 x 1920), 3 MP (2048 x 1536), 3 MP (2304 x 1296), 1080p (1920 x 1080), 1.3 MP (1280 x 960), 720p (1280 x 720), D1 (704 x 480),
Third Stream: 1080p at 30 fps Bit Rate Control CBR, VBR H.264: 24 to 16384 Kbps	Frame Rate	Main Stream: 12 MP at 20 fps or 4K at 30 fps
Bit Rate Control CBR, VBR Bit Rate H.264: 24 to 16384 Kbps		Sub Stream: D1 at 30 fps
Bit Rate H.264: 24 to 16384 Kbps		Third Stream: 1080p at 30 fps
Bit Rate	Bit Rate Control	CBR, VBR
	Bit Rate	

 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.

Day/Night	Auto (ICR), Color, B/W
BLC Mode	BLC, HLC, DWDR, SSA
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)
Electronic Image Stabilization(EIS)	Support
Smart IR	Support
Defog	Support
Digital Zoom	16x
Flip	0°, 90°, 180°, 270°
Mirror	Off, On
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
Max. User Access	10 Users / 20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card, maximum 128 GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS
Mobile Operating Systems	IOS, Android
Certifications	
Safety	UL60950-1
Electromagnetic Compatibility (EMC)	FCC Part 15 Subpart B
Interface	
Audio	Input: One (1) Channel Output: One (1) Channel
Alarm	Input: One (1) Channel Output: One (1) Channel
Electrical	
Power Supply	12 VDC, 24 VAC, PoE+ (802.3at, Class 4)
Power Consumption	<18 W

Ultra Series | NK8BL7Z

Environmental

Operating Conditions	-40° C to +60° C (-40° F to +140° F), with built-in heater Less than 95% RH
Storage Conditions	-40° C to +60° C (-40° F to~ +140° F) Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10
Construction	
Casing	Metal
Dimensions	ø159.10 mm x 117.90 mm (ø6.26 in. x 4.64 in.)
Net Weight	0.96 kg (2.12 lb)
Gross Weight	1.75 kg (3.56 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 Features	
Motion	An object moves through any part of the scene.
Tripwire	A target crosses a user-defined line.
Intrusion	A target enters or exits a defined perimeter.
Scene Change	A person or object moves the camera to change the scene or covers the camera to obscure the scene.
Abandoned/Missing Object	A target leaves an object in designated area, or a target removes an object from the same designated area.
Advanced Features	
Facial Detection	Detects and captures a snapshot of a human face in a defined area within a scene.
People Counting	Measure the number of customers, visitors or passengers in a surveillance scene.
Heat Map	Generates a visual representation of data.

Ordering Information			
Туре	Part Number	Description	
12 MP Camera	NK8BL7Z	12 MP IR Dome Network Camera, Built-in Heater, IVS	
Accessories, included	PFA138	Junction Box	
Accessories, optional	PFA101	Mount Adapter	
	PFA152	Pole Mount	
	PFB201C	In-ceiling Mount	
	PFB300C	Ceiling Mount	
	PFB302S	Wall Mount	

Accessories

Optional:





PFA138

Juntion Box



PFB302S Wall mount

PFB201C In-ceiling mount

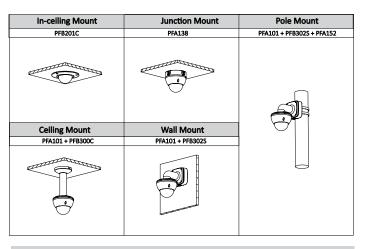




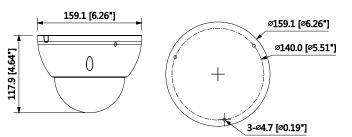
PFB300C Ceiling mount

PFA152 Pole mount

PFA101 Mount adapter



Dimensions (mm/inch)





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