Manuals+ — User Manuals Simplified.

dahua Pro Series 2 x 4MP Multi-Sensor Network Dome Camera Instructions

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INSTALLATION INSTRUCTION

WizMind Series devices offer Dahua Analytics+ functions for comprehensive, human-oriented analytic solutions. WizMind Series products are ideal for complex applications with demanding requirements that need advanced analytic capabilities.

System Overview

The Dahua 2 x 4MP Dual-sensor Dome Camera offers advanced analytics and Starlight functionality for complete security solution. Each sensor can be positioned and configured independently of the other allowing flexible, multi-directional video security that is ideal for monitoring an entire corridor, a stairwell, or a street. In addition, Analytic+ functions can be applied to each channel and enabled simultaneously. The camera offers True Wide Dynamic Range, a True Day/Night IR Cut filter, IP67 Ingress protection and operation in extreme temperatures to deliver superior images in all lighting and environmental conditions.
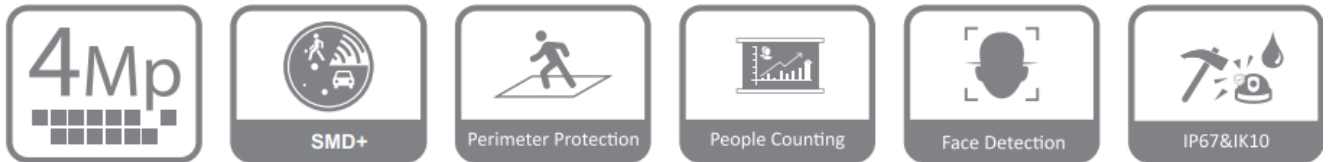
Functions

Perimeter Protection

- Dahua Analytics+ includes Tripwire and Intrusion functions that offer custom tripwires based on object type for automation in limited access areas. Perimeter Protection requires less pixels to detect an object to deliver improved accuracy and decreased false alarms due to lights, weather, trees, or animals.

People Counting

- The camera uses complex real-time people counting algorithms to deliver accurate flow statistics from two distinct people counting functions, Line Crossing and Regional. The line-crossing function counts the number of people crossing a defined line, and the regional function counts the number of people in a distinct, user-defined area.

Starlight Technology

- For challenging low-light applications, Dahua's Enhanced Starlight Technology offers best-in-class light sensitivity, capturing details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.
- Two (2) Independent 1/2.7-in. 4MP CMOS Sensors
- Triple-stream Encoding per each Channel
- AI Coding, Smart H.265+, and Smart H.264+ Video Compression
- Two (2) 2.8 mm Fixed Lenses
- Analytics+ Functions — Perimeter Protection, Smart Motion Detection+, People Counting, and Face Detection
- Option to Display Dual Video in the First Channel
- Enhanced Starlight Technology for Low Light Sensitivity
- ArcticPro Series Camera — Operational down to –40° C (–40° F)
- IP67 Ingress Protection and IK10 Vandal Resistance
- Built-in Microphone
- Maximum IR LED Distance 30 m (98.43 ft)
- Five-year Warranty*

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.

AI Coding

- The AI Coding function puts recording emphasis on human or vehicular objects in the video scene. This technology, based on constant bit rate (CBR), dynamically allocates increased bit rate to the target object while reducing the bit rate allocated to background objects. AI Coding reduces bit rate and storage requirements by up to 25% when compared to the H.265 video compression standard.

Smart Illumination

- 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.

Cybersecurity

- Dahua network cameras are equipped with a series of key cybersecurity technologies including: security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage. These technologies improve the camera's ability to prevent malicious access and to protect data.

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

Camera

Image Sensor	Two (2) 1/2.7-in. 4MP CMOS
Effective Pixels	2560(H) x 1440(V)
RAM/ROM	1 GB / 128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto, Manual; 1/3 s to 1/100,000 s
Minimum Illumination	Color: 0.005 lux at F1.6 (30 IRE) Color: 0.0005 lux at F1.6 (30 IRE) 0 lux at F1.6 with IR on
S/N Ratio	More than 56 dB
IR Distance	Distance up to 30.0 m (98.43 ft)
IR On/Off Control	Auto, Manual
IR LEDs	Eight (8) LEDs per sensor (16 total)

Lens

Lens Type	Fixed
Mount Type	M12
Focal Length	2.8 mm
Max. Aperture	F1.6
Angle of View	Horizontal: 95° Vertical: 52° Diagonal: 114°
Iris Control	Fixed
Close Focus Distance	1.10 m (3.61 ft)

DORI[1] Distance	Detect (8 ppf)		Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
	63.60 m (208.66 ft)		25.40 m (83.33 ft)	12.70 m (41.67 ft)	6.40 m (21.0 ft)

Installation Angle

Range	Pan: 0˚ to 175˚ Tilt: 0˚ to 65˚ Rotation: 0˚to 360˚

Video

Compression		AI Coding, Smart H.265+, H.265, Smart H.264+, H.264, H.264H, H.264B, MJPEG (Sub Stream)
Streaming Capability		Three (3) Streams per Sensor
Resolution		4MP (2688 x 1520), 3MP (2048 x 1536), 2304 x 1296, 1080p (1920 x 1080), 1.3MP (1280 x 960), 720p (1280 x 720), D1 (704 x 480), VGA (640 x 480), CIF (352 x 240)
Frame Rate	Main Stream	Channel 1: 2560 x 1440 at 30 fps Channel 2: 2560 x 1440 at 30 fps
	Sub Stream	Channel 1: 704 x 480 at 30 fps Channel 2: 704 x 480 at 30 fps
	Sub Stream 2	Channel 1: 1920 x 1080 at 30 fps Channel 2: 1920 x 1080 at 30 fps

Bit Rate Control	CBR, VBR
Bit Rate	H.264: 32 to 8192 Kbps H.265: 12 to 8192 Kbps
Day/Night	Auto (ICR), Color, B/W
BLC Mode	BLC, HLC, True WDR, SSA
White Balance	Auto, Natural, Street Lamp, Outdoor, Manual, Regional Custom
Gain Control	Auto, Manual, Gain Priority, Shutter Priority
Noise Reduction	3D DNR
Motion Detection	Off, On (4 Zones, Rectangle)
Region of Interest	Off, On (4 Zones)
Advanced Functions	Smart Illumination, Defog
Flip	0°, 90°, 180°, 270°
Mirror	Off, On
Privacy Masking	Off, On (8 Areas, Rectangular)

Audio

Compression	PCM, G.711a, G.711Mu, G.726, G.723

Network

Ethernet	RJ-45 (10/100 Base-T)
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP
Interoperability	ONVIF Profile S, G, T, CGI, P2P, API, SDK
Streaming Method	Unicast, Multicast
Maximum User Access	20 Users (Total Bandwidth: 64 Mbps)
Edge Storage	Network Attached Storage (NAS) FTP, SFTP Micro Card Slot, 256 GB maximum
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	DSS, DMSS
Mobile Operating System	IOS, Android
Cybersecurity	Video Encryption, Firmware Encryption, Configuration Encryption, Digest, WSSE, Account Lockout, Security Logs, IP/MAC Filtering, Generating and Importing X.509 Certification, Syslog, HTTPS, 802.1x, Trusted Boot, Trusted Execution, Trusted Upgrade

Certifications

Safety	UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14 EN62368-1
Electromagnetic Compatibility (EMC)	CFR 47 FCC Part 15 Subpart B Electromagnetic Compatibility Directive 2014/30/EU

Interface

Audio	Input	One (1) Channel, RCA plus a Built-in Microphone
	Output	One (1) Channel, RCA
Alarm	Input	Two (2) Channels (5 mA, 3 VDC to 5 VDC)
	Output	Two (2) Channels (300 mA, 12 VDC)

Electrical

Power Supply		12 VDC or PoE (IEEE 802.3af, Class 0)
Power Consumption	12 VDC	6.6 W, maximum
	PoE	8 W, maximum

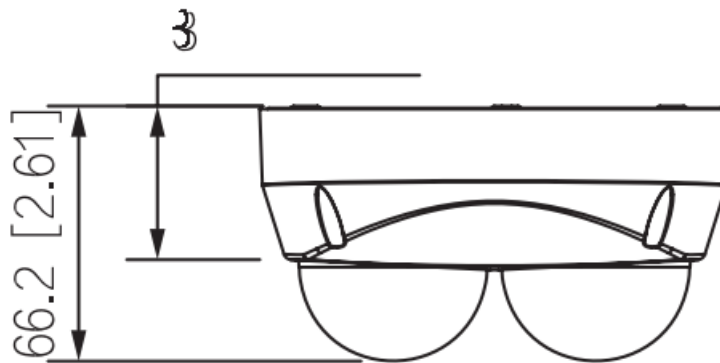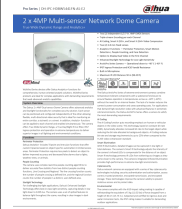| **Environmental**	
Operating Temperature	−40° C to +60° C (−40° F to +140° F) Less than 95% RH
Storage Temperature	−40° C to +60° C (−40° F to +140° F) Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10
Construction	
Casing	Metal
Dimensions	ø122.0 mm x 66.20 mm (4.79 in. x 2.61 in.)
Net Weight	0.52 kg (1.15 lb)
Gross Weight	0.67 kg (1.48 lb)

Accessories

Optional:

PFA137
Junction Box

Dimensions (mm/inch)

- us.dahuasecurity.com

Documents / Resources

[dahua Pro Series 2 x 4MP Multi-Sensor Network Dome Camera](#) [pdf] Instructions
Pro Series 2 x 4MP Multi-Sensor Network Dome Camera, Pro Series, 2 x 4MP Multi-Sensor Network Dome Camera, 4MP Multi-Sensor Network Dome Camera, Multi-Sensor Network Dome Camera, Network Dome Camera, Dome Camera, Camera

References

- ℗ **Dahua Technology USA Inc - Dahua Technology USA Inc**

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