4MP Fixed Bullet Network Camera

True Wide Dynamic Range IR Network Camera

- 1/3-in. 4MP Progressive-scan CMOS Sensor
- Dual Stream Encoding
- Smart H.265+ and Smart H.264+ Dual Codecs
- 4MP at 20 fps Maximum Resolution, 2.8 mm Fixed Lens
- Starlight Technology for Low Light Sensitivity
- True WDR (120 dB) and Day/Night (ICR)
- Maximum IR LED Length 30 m (98.43 ft) with Smart IR
- Intelligent Video System
- ArcticPro Series Camera - Operational down to –40° C (–40°)
- IP67 Ingress Protection
- Five-year Warranty*

ArcticPro

4Mp H.265+ WDR Starlight IVS IP67

System Overview

The Dahua 4MP Lite Series cameras offer high-resolution video and cutting-edge technology in a compact and accessible package. The cameras feature Smart H.265+ video compression, reducing bandwidth and storage requirements without sacrificing video quality. The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

Functions

Starlight Technology

For challenging low-light applications, Dahua's Basic Starlight Technology offers best-in-class light sensitivity, capturing details in low light down to 0.008 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

Wide Dynamic Range (WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Intelligent Video System

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

Smart IR Technology

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 (98.43 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.

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

Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

*Warranty applies to products sold through an authorized Dahua Dealer.

Technical Specification

Camera

Image Sensor	1/3-in. 4MP Progressive-scan CMOS
Effective Pixels	2688(H) x 1520(V)
RAM/ROM	128 MB / 128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto, Manual; 1/3 s to 1/100000 s
Minimum Illumination	Color: 0.008 lux at F1.6 0 lux at F1.6 with IR on
IR Distance	Distance up to 30.0 m (98.43 ft)
IR On/Off Control	Auto, Manual
IR LEDs	One (1)

Lens

Lens Type	Fixed-focal
Iris Type	Fixed Aperture
Mount Type	M12
Focal Length	2.8 mm
Maximum Aperture	F1.6
Field of View	Horizontal: 102.0° Vertical: 55.0° Diagonal: 121.1°
Close Focus Distance	0.90 m (2.95 ft)

DORI² Distance	Lens	Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
	2.8 mm	56.0 m (183.73 ft)	22.40 m (73.49 ft)	11.20 m (36.75 ft)	5.60 m (18.37 ft)

Pan/Tilt/Rotation

Range	Pan: 0° to 360° Tilt: 0° to 90° Rotation: 0° to 360°

Video

Compression		Smart H.265+, H.265, Smart H.264+, H.264, H.264B, MJPEG
Streaming Capability		Two (2) Streams
Resolution		2688 x 1520, 2560 x 1440, 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	2688 x 1520 at 20 fps or 2560 x 1440 at 30 fps
	Sub Stream	D1 (704 x 480) at 30 fps
Bit Rate Control		CBR/VBR
Bit Rate		H.264: 32 K to 6144 Kbps H.265: 12 K to 6144 Kbps
Day/Night		Auto (ICR), Color, B/W
Backlight		BLC, HLC, True WDR (120 dB)
White Balance		Auto, Natural, Street Lamp, Outdoor, Manual, Regional Custom
Gain Control		Auto, Gain Priority, Shutter Priority, Manual
Noise Reduction		3D DNR
Motion Detection		Off, On (4 Zones, Rectangle)
Region of Interest		Off, On (4 Zones)
Smart IR		Support
Digital Zoom		16x
Image Rotation		0°, 90°, 180°, 270°
Mirror		Off, On
Privacy Masking		Off, On (4 Areas, Rectangle)

Network

Ethernet	RJ-45 (10/100 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 (Profile S, G, T), CGI, P2P
Auto Register	Support
Streaming Method	Unicast, Multicast
Max. User Access	20
Edge Storage	Network Attached Storage (NAS) FTP, SFTP Micro SD Card slot (maximum 256 GB)
Web Viewer	IE, Chrome, Firefox
Management Software	Smart PSS, 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	UL60950-1 CAN/CSA C22.2 No.60950-1-07 EN 60950-1
Electromagnetic Compatibility (EMC)	FCC CFR 47 Part 15 Subpart B Electromagnetic Compatibility Directive 2014/30/EU

Electrical

Power Supply	12 VDC ± 30%, or PoE (IEEE802.3af Class 0)
Power Consumption	< 5 W

Environmental

Operating Conditions	–40° C to +60° C (–40° F to +140° F), Less than 95% RH
Storage Conditions	–40° C to +60° C (–40° F to +140° F)
Ingress Protection	IP67

Construction

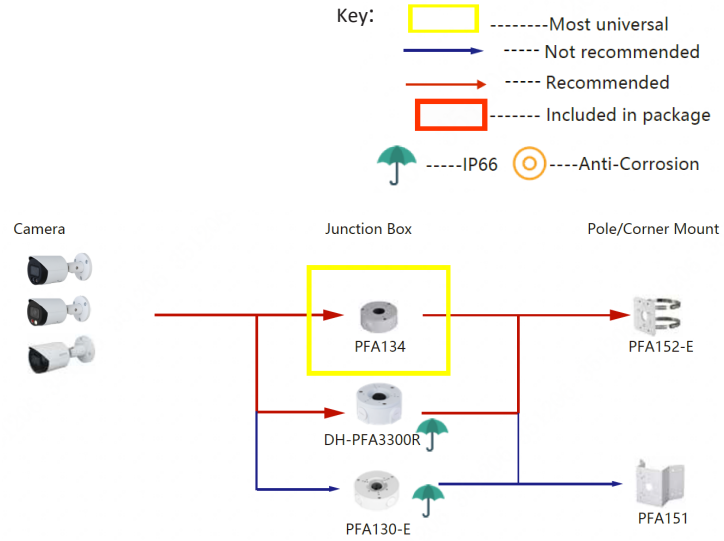
Casing	Metal
Dimensions	166.20 mm x ø70.0 mm (6.54 in. x ø2.76 in.)
Net Weight	0.48 kg (1.10 lb)
Gross Weight	0.57 kg (1.30 lb)

Core Analytics

Triggers an alarm and takes a defined action for the following events:

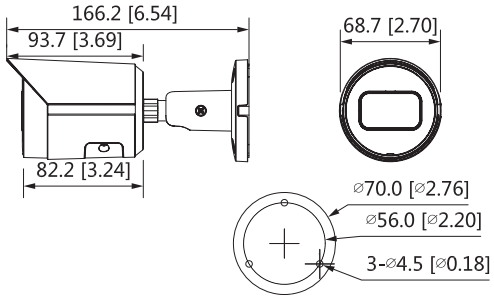
Standard Features	• Tampering with the camera. • Error writing to an onboard Micro SD card. • Error sending or receiving data over the network. • Unauthorized access to the camera.
Premium Features	
Tripwire	A target crosses a user-defined line.
Intrusion	A target enters or exits a defined perimeter.

Mounting Diagram



For all possible accessory combinations for this camera, please scan or click the QR code below to go to our accessory selector.

Dimensions (mm/inch)



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.