

# 4MP E-VU Network Eyeball Camera (2.8 mm)

Entry-level Viewing IR Camera with Motion Detection







#### **System Overview**

The Dahua 4MP Entry-level Viewing (E-VU) Camera Series offers high-resolution video in a compact and accessible package. The camera features Smart H.265+ video compression, reducing bandwidth and storage requirements without sacrificing video quality. The camera's elegant blend of aesthetics combined with range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

#### **Functions**

#### 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.

#### Smart IR 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 up to 30 m (98.43 ft).

- 1/3-in. 4MP Progressive-scan CMOS Sensor
- · Dual Stream Encoding
- Smart H.265+ and Smart H.264+ Dual Codecs
- 4MP at 30 fps Maximum Resolution, 2.8 mm Fixed Lens
- DWDR and Day/Night (ICR)
- Maximum IR LED Length 30 m (98.43 ft) with Smart IR
- Motion Detection
- ArcticPro Series Camera Operational down to -40 °C (-40 °F)
- IP67 Ingress Protection
- 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  $-40^{\circ}F$  ( $-40^{\circ}C$ ) 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.

Image Seador   2,956, 4918 Progressive Sead ORGS   Fifth Chick Progressive Sead ORGS   Fifth Chick Progressive Scanning System   Progressive   Fig.   Fifth Chick Progressive   Fifth Chick Pr	Technical S	ресіпсатю	П					Network	
Image Senior   236-00 ft 3-14-00 ft 1	Camera							Ethernet	RJ-45 (10/100 Base-T)
### SAM/NOM   64 MB / 3 ft MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   0   Total Bandwidth 48 MB   1 Max. User Access   1 Max	Image Sensor		1/3-in. 4MP Progressive-scan CMOS					Protocol	IPv4, IPv6, HTTP, TCP, UDP, ARP, RTIP, RTSP, SMT FTIP, DHCP, DNS, DDNS, NTP, Multicast
Scienting System	Effective Pixels		2560 (H) × 1440 (V)					Interoperability	ONVIF (Profile S,T), CGI, P2P, SDK, API
Control   Shutter   Speed   Auro, Manual; 1/3 s. to 1/100000 s.	RAM/ROM		64 MB / 16 MB					Max. User Access	6 (Total Bandwidth: 48 MB)
Minimum Illumination	Scanning System		Progressive					Edge Storage	FTP
Mobile Operating System   Special System Special Operating System   Special System   Spec	Electronic Shutter Speed		Auto, Manual; 1/3 s to 1/100000 s					Web Viewer	IE, Chrome, Firefox
Syk Ratio   So   So   So   So   So   So   So	Minimum Illumination		B/W, 30 IRE: 0.003 lux at F2.0						
R Distance	S/N Ratio							Cybersecurity	Video Encryption Configuration Encryption, Dig WSSE, Account Lockout, Security Logs, Generat
R On/Off Control   Auto, Manual   Book, Trusted Execution, Trusted Upgrade	·								
Lens   Safety		rol							
Lens Type	•	101						Certifications	
Electromagnetic Compatibility   FCC CFR 47 Part 15 Subpart 8   Electromagnetic Compatibilit			One (1)						
Interview   Fixed	Lens							·	
First   Firs	Lens Type  Iris Type								y FCC CFR 47 Part 15 Subpart B Electromagnetic Compatibility Directive 2014/3
Maximum Aperture	Mount Type							Electrical	
Field of View	Focal Length							Power Supply	12 VDC or PoE (802.3af)
Vertical 50"   Diagonal 107"	Maximum Aperture		F2.0						Basic: 1.6 W (12 VDC), 2.4 W (PoE)
Detect   Observe   Recognize   Identify	Field of View		Vertical: 50°					Power Consumption	Maximum (ICR + H.265 + IR Intensity): 3.6 W (1 VDC), 4.7 W (PoE)
DOR! DISTANCE   G8.0 m   27.2 m   13.6 m   6.8 m   (223.10 ft)   (89.24 ft)   (44.62 ft)   (22.31 ft)   Storage Conditions   —40°C to +60°C (−40°F to +140°F)	Close Focus Distance		1.0 m (3.28 ft)	)				Environmental	
C223.10ft   C223.10ft   C223.10ft   C223.10ft   C223.1ft   C223.1ft   C223.1ft   Storage Conditions   -40°C to +60°C (-40°F to +140°F)	DORI¹ Distance				_			Operating Conditions	
Pan/Tilt/Rotation  Range Pan: 0' to 355' Tilt: 0' to 78' Rotation: 0' to 355' Tilt: 0' to 78' Notation: 0' to 355' Tilt: 0' to 78' Notation: 0' to 355' Video  Compression Smart H.265+, H.265, Smart H.264+, H.264, H.264B, MIPEG  Streaming Capability Two (2) Streams  AMP (2560 × 1440), 3MP (2304 × 1296), 1080p (1920 × 1080), 13MP (1280 × 960), 720p (1280 × 720), D1 (704 × 480), Video (460 × 480), Cife (1625 × 240)  Frame Rate Sub Stream 704 × 480 at 1 to 30 fps  Bit Rate Control CBR/VBR  Bit Rate H.264: 32 kpbs to 4096 Kbps H.265: 12 kpbs to 4096 Kbps Backlight BLC, HLC, DWDR  White Balance Custom Auto, Gain Priority, Shutter Priority, Manual Noise Reduction 3D DNR  Motion Detection Off, On (4 Zones)  Smart IR Support  Ingress Protection IP67  Construction  Casing Metal  Dimensions 8.8.6 mm x 94.0mm (3.4 in. x 3.7 in.)  Net Weight 0.32 kg (0.71 lb)  Gross Weight 0.43 kg (0.95 lb)  Intelligent Video System Functions  Standard Features **  * Tampering with the camera.  * Error sending or receiving data over the netwo **  * Unauthorized access to the camera.  * Error sending or receiving data over the netwo **  * Unauthorized access to the camera.  * Motion An object moves through any part of the scene.  * Motion An object moves through any part of the scene.  * Motion An object moves through any part of the scene.  * Tampering with the camera.  * Error sending or receiving data over the netwo **  * Unauthorized access to the camera.  * Branker But Auto (ICR), Color, B/W  * Backlight BLC, HLC, DWDR  * Motion Detection Off, On (4 Zones)  * Tampering with the camera.  * Tampering with the camera.  * Error sending or receiving data over the netwo **  * Unauthorized access to the camera.  * Error sending or receiving data over the netwo **  * Unauthorized access to the camera.  * Error sending or receiving attack the scene.  * Tampering with the camera.  * Error sending or receiving attack the scene.  * Tampering with the camera.  * Error sending or receiving attack the scene.  * Tampering with the camera.  * Error send								Storage Conditions	·
Range Pan: 0' to 355' Til: 0' to 78' Rotation: 0' to 355' Video  Video  Smart H.265+, H.265, Smart H.264+, H.264B, MIPEG  Compression Smart H.265+, H.265, Smart H.264+, H.264B, MIPEG  Streaming Capability Two (2) Streams  AMP (2560 × 1440), 3MP (2304 × 1296), 1080p (1920 × 1080), 13MP (1280 × 960), 720p (1280 × 720), D1 (704 × 480), VGA (640 × 480), CIF (352 × 240)  Frame Rate Main Stream Sub Stream 704 × 480 at 1 to 30 fps  Bit Rate Control CBR/VBR  Bit Rate Control CBR/VBR  Auto (ICR), Color, B/W  Backlight BLC, HLC, DWDR  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  Metal  Casing Metal  Dimensions 85.6 mm x 94.0mm (3.4 in. x 3.7 in.)  Net Weight 0.32 kg (0.71 lb)  Gross Weight 0.43 kg (0.95 lb)  Net Weight 0.32 kg (0.71 lb)  Gross Weight 0.43 kg (0.95 lb)  Intelligent Video System Functions  **Standard Features**  **Standard Features**  **Standard Features**  **Standard Features**  **Other Transpering with the camera.**  **Motion An object moves through any part of the scene.**  Motion An object moves through any part of the scene.**  Motion An object moves through any part of the scene.**  Motion Off, On (4 Zones, Rectangle)  Region of Interest Off, On (4 Zones, Rectangle)  Region of Interest Off, On (4 Zones)  Smart IR Support  Mirror Off, On (4 Zones)  Off, On (4 Areas)	Pan/Tilt/Rotation							_	
Casing Metal Dimensions 85.6 mm x 94.0 mm (3.4 in. x 3.7 in.)  Compression Smart H.265+, H.265, Smart H.264+, H.264B, MJPEG Streaming Capability Two (2) Streams  AMP (2560 x 1440), 3MP (2304 x 1296), 1080p (1920 x 480), VCA (640 x 480), CIF (352 x 240)  Resolution Amnual Stream Sub Stream Sub Stream Sub Stream 704 x 480 at 1 to 30 fps  Bit Rate Control CBR/VBR Bit Rate H.264: 32 kpbs to 4096 kbps H.265: 12 kpbs to 4096 kbps H.265: 12 kpbs to 4096 kbps Day/Night Auto (ICR), Color, B/W Backlight Bl.C., HLC, DWDR 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)  Smart IR Support  Mirror Off, On (7, 180° (0°by defaultr)  Mirror Off, On (4 Areas)	Range						Construction		
Smart H.265+, H.265, Smart H.264+, H.264, H.264B, MPEG			Rotation: 0° to 355°					Casing	Metal
Streaming Capability Two (2) Streams  AMPEG  Gross Weight  O.43 kg (0.95 lb)  Intelligent Video System Functions  Intelligent Video System	Video							Dimensions	85.6 mm x 94.0mm (3.4 in. x 3.7 in.)
Streaming Capability  Two (2) Streams  AMP (2560 × 1440), 3MP (2304 × 1296), 1080p (1920 × 1080), 1.3MP (1280 × 960), 720p (1280 × 720), D1 (704 × 480), UNGA (640 × 480), CIF (352 × 240)  Frame Rate  Main Stream Sub Stream Sub Stream O4 × 480 at 1 to 30 fps  Bit Rate Control  CBR/VBR  H.264: 32 kpbs to 4096 kbps H.265: 12 kpbs to 4096 kbps H.265: 12 kpbs to 4096 kbps Bit Rate  Auto, (ICR), Color, B/W Backlight  BLC, HLC, DWDR  White Balance Gain Control  Auto, Matural, Street Lamp, Outdoor, Manual, Regional Custom  Motion Detection Off, On (4 Zones, Rectangle)  Region of Interest Off, On (4 Zones)  Smart IR  Support  Intelligent Video System Functions  * Tampering with the camera.  * Tam	Compression			, H.265, Smart	H.264+, H.264	, Н.264В,		Net Weight	0.32 kg (0.71 lb)
Resolution  ### AMP (2560 × 1440), 3MP (2304 × 1296), 1080p (1920 × 1080), 13MP (1280 × 960), 720p (1280 × 720), D1 (704 × 480), L1 Ampering with the camera.  ### Amain Stream								Gross Weight	0.43 kg (0.95 lb)
Frame Rate    Main Stream   2560 × 1440 at 1 to 30 fps   5to 480 at 1 to 30 fps   5to 480 at 1 to 30 fps   5to 480 at 1 to 30 fps   5to 496 Kbps   1.264: 32 kpbs to 4096 Kbps   1.265: 12			4MP (2560 × 1440), 3MP (2304 × 1296), 1080p (1920 × 1080), 1.3MP (1280 × 960), 720p (1280 x 720), D1 (704 x						
Sub Stream 704 × 480 at 1 to 30 fps  Bit Rate Control CBR/VBR  Bit Rate H.264: 32 kpbs to 4096 kbps H.265: 12 kpbs to 4096 kbps  Day/Night Auto (ICR), Color, B/W  Backlight BLC, HLC, DWDR  White Balance Custom 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  Image Rotation 0°, 180° (0°by defaultr)  Mirror Off, On  Privacy Masking Off, On (4 Areas)	Main Stream							Standard Features	Error sending or receiving data over the network
Bit Rate Control CBR/VBR H.264: 32 kpbs to 4096 Kbps H.265: 12 kpbs to 4096 Kbps Auto (ICR), Color, B/W Backlight BLC, HLC, DWDR Auto, Natural, Street Lamp, Outdoor, Manual, Regional Custom Custom 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 Image Rotation Off, On (Motion Detection O			704 × 480 at 1 to 30 fps					Motion	
Day/Night Auto (ICR), Color, B/W Backlight BLC, HLC, DWDR  White Balance Custom Auto, Gain Priority, Shutter Priority, Manual Noise Reduction 3D DNR  Motion Detection Off, On (4 Zones)  Smart IR Support  Image Rotation Off, On Privacy Masking Off, On (4 Areas)	Bit Rate Control							Wotion	An object moves through any part of the sectic.
Backlight  BLC, HLC, DWDR  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  Image Rotation  O*, 180* (0*by defaultr)  Mirror  Off, On  Privacy Masking  Off, On (4 Areas)									
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  Image Rotation 0°, 180° (0°by defaultr)  Mirror Off, On  Privacy Masking Off, On (4 Areas)									
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  Image Rotation 0°, 180° (0°by defaultr)  Mirror Off, On  Privacy Masking Off, On (4 Areas)									
Noise Reduction 3D DNR  Motion Detection Off, On (4 Zones, Rectangle)  Region of Interest Off, On (4 Zones)  Smart IR Support  Image Rotation 0°, 180° (0°by defaultr)  Mirror Off, On  Privacy Masking Off, On (4 Areas)	White Balance		Custom						
Motion Detection Off, On (4 Zones, Rectangle)  Region of Interest Off, On (4 Zones)  Smart IR Support  Image Rotation 0°, 180° (0°by defaultr)  Mirror Off, On  Privacy Masking Off, On (4 Areas)	Gain Control								
Region of Interest Off, On (4 Zones)  Smart IR Support  Image Rotation 0°, 180° (0°by defaultr)  Mirror Off, On  Privacy Masking Off, On (4 Areas)	Noise Reductio	n							
Smart IR Support  Image Rotation 0°, 180° (0°by defaultr)  Mirror Off, On  Privacy Masking Off, On (4 Areas)	Motion Detect	ion							
Image Rotation     0°, 180° (0°by defaultr)       Mirror     Off, On       Privacy Masking     Off, On (4 Areas)	Region of Inter	est							
Mirror Off, On Privacy Masking Off, On (4 Areas)	Smart IR		Support						
Privacy Masking Off, On (4 Areas)	Image Rotation	1	0°, 180° (0°by defaultr)						
Privacy Masking Off, On (4 Areas)	Mirror		Off, On						
	Privacy Maskin	g	Off, On (4 Are	as)			1	The DORI distance is a measure of th	e general proximity for a specific classification to help pings

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.

### Lite Series | N41CJ02

Ordering Information									
Туре	Part Number	Description							
4MP Camera	N41CJ02	4MP E-VU IR Fixed-focal Eyeball Network Camera							
	DH-PFA13A-E	Junction Box							
Accessories,	PFA130-E	Waterproof Junction Box							
optional	PFB204W	Wall Mount Bracket							
	PFA152-E	Pole Mount							

## **Dimensions** mm [in.] Ø94 [Ø3.7] Ø68.5 [Ø2.7] 85.6 [3.37] Ø4.5 [Ø0.18]

#### **Accessories (Optional)**









DH-PFA13A-E Junction Box

PFA130-E Waterproof Junction Box

PFB204W Wall Mount Bracket

PFA152-E Pole Mount

Ceiling Mount	Wall Mount	Pole Mount (Vertical)
DH-PFA13A-E or PFA130-E	PFB204W	PFB204W + PFA152-E

