

# 4 MP Fixed Wedge Network Camera

4 MP IR Wedge Network Camera



# **System Overview**

Dahua's Mobile series of cameras offers high-resolution video and cutting-edge technology in a compact and accessible package. The cameras feature H.265 video compression, reducing bandwidth and storage requirements without sacrificing video quality. The camera series incorporates True Wide Dynamic Range, Smart IR, and the Intelligent Video Analysis, features typically found on high-end surveillance systems. This series provides a rugged enclosure rated to IP67 Ingress Protection to protect your security investment.

## **Functions**

# Wide Dynamic Range

For applications with both bright and low-light 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)

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.

## High Efficiency Video Coding (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

- 1/3-in. 4 MP Progressive Scan CMOS
- Triple-stream Encoding with Smart H.265+ Compression
- 4 MP (2688 x 1520) at 30 fps Maximum Resolution
- Smart Detection Support
- True WDR (120 dB) and Day/Night IR Cut Filter
- Built-in Microphone
- 2.8 mm or 3.6 mm Fixed Lens Options
- Maximum IR LED Length 20 m (65 ft)
- Micro SD Memory, IP67, IK10, PoE
- · Five-year Warranty













#### 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

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.

#### Environmental

With a temperature range of-30 °C to +60 °C (-22 °F to +140 °F), the camera is designed for extreme temperature environments. The camera complies to an IK10 impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

### Protection

Supporting  $\pm 30\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides protection against the camera and its structure from the effects of lightning.



Technical Specification			
Camera			
Image Sensor		1/3-in. 4 MP Progressive Scan CMOS	
Effective Pixels		2688(H ) x 1520(V)	
RAM/ROM		512 MB / 32 MB	
Scanning System		Progressive	
Minimum Illumination		Color: 0.08 Lux at F2.0 0 Lux at F2.0 with IR on	
S/N Ratio		More than 50 dB	
IR Distance		Distance up to 20.0 m (65.60 ft)	
IR On/Off Contr	ol	Auto, Manual	
IR LEDs		10	
Lens			
Lens Type		Fixed	
Mount Type		Board-in	
Focal Length		N44BN52: 2.8 mm N44BN53: 3.6 mm	
Maximum Aper	ture	F2.0	
Angle of View	Horizontal	N44BN52: 104° N44BN53: 87°	
Aligie of View	Vertical	N44BN52: 57° N44BN53: 48°	
Focus Control		Fixed	
Pan/Tilt/Rot	ation		
Range		Pan: 0° to 360° Tilt: 0° to 80° Rotation: 0° to 360°	
Video			
Compression		Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	
Streaming Capa	bility	Three (3) Streams	
Resolution		4 MP (2688 x 1520) 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 (352 x 240)	
		Main Stream: 4 MP at 30 fps	
Frame Rate		Sub Stream: D1 at 30 fps	
		Third Stream: 720p at 30 fps	
Bit Rate Control		CBR, VBR	
Bit Rate		H.264: 24 to 10240 Kbps H.265: 14 to 6144 Kbps	
Day/Night		Auto (ICR), Color, B/W	
BLC Mode		BLC, HLC, True WDR (120 dB)	

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
Flip	0°, 90°, 180°, 270°
Privacy Masking	Off, On (4 Area, Rectangle)
Audio	
Compression	G.711a, G.711Mu, AAC, G.726
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, PSIA, CGI
Streaming Method	Unicast, Multicast
Max. User Access	10 Users / 20 Users
Edge Storage	NAS Local PC for Instant Recording MicroSD Card, maximum 128 GB
Web Viewer	IE, Firefox, Safari
Management Software	Smart PSS, DSS
Mobile Operating System	IOS, Android
Certifications	
Safety	UL60950-1
Electromagnetic Compatibility	FCC Part 15 Subpart B
Interface	
Audio	Built-in Microphone
Electrical	
Power Supply	12 VDC, PoE (802.3af, Class 0)
Power Consumption	< 4.5 W

## Environmental

Operating Conditions	-30° C to +60° C (-22° F to +140° F), Less than 95% RH
Storage Conditions	-30° C to +60° C (-22° F to +140° F), Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

## Construction

Casing	Metal
Dimensions	ø106.0 mm x 50.30 mm (ø4.17 in. x 1.98 in.)
Net Weight	0.40 kg (0.88 lb)
Gross Weight	0.44 kg (0.97 lb)

# Intelligence

**Facial Detection** 

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

Standard Features	<ul> <li>Tampering with the camera.</li> <li>Error writing to an onboard Micro SD card.</li> <li>Error sending or receiving data over the network.</li> <li>Unauthorized access to the camera.</li> </ul>

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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 human face in a

defined area within a scene.

#### **Ordering Information** Part Number Description Type 4 MP IR Mini Dome Network Camera, N44BN52 2.8 mm, WDR, IVS 4 MP camera 4 MP IR Mini Dome Network Camera, N44BN53 3.6 mm, WDR, IVS PFB204W Wall mount PFA139 Junction box Accessories (optional) PFA150 Pole mount PFA152 Pole mount

# **Accessories**

## **Optional:**







PFA139 Junction Box

PFB204W Wall Mount

PFA152 Pole Mount

Junction Mount	Pole Mount
PFA139	PFB204W + PFA152
Wall Mount	
PFB204W	



