DAHUA TECHNOLOGY

4 MP Dome Network Camera

WDR IR Dome Network Camera

- 1/3-in. 4 MP Progressive CMOS
- Smart H.264+[1] and H.264 Dual-stream Encoding
- 4 MP at 20 fps and 2 MP at 30 fps
- WDR (120 dB), Day/Night (ICR), 3DNR, AWB, AGC, BLC
- Multiple Network Monitoring: Web Viewer, CMS (DSS/PSS) and DMSS
- Micro SD Card Support, up to 128 GB
- 2.7 mm to 12 mm Varifocal Lens
- Max. IR LED Length 30 m (98 ft)
- IP67, IK10, PoE

4Mp | H.264+ | WDR | 30m IR | IP67 | Vandal-proof

System Overview

Dahua's Lite series of cameras offers high-resolution video and cutting-edge technology in a compact and accessible package. The cameras feature Smart H.264+ 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

True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

Regions of Interest

Regions of Interest (ROI) is a user-defined feature that allows the operator to monitor specific areas of a scene while still maintaining overall situational awareness of less important areas.

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 camera's infrared LEDs to compensate 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 ft).

Wide Dynamic Range

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.

Image flip

Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

Smart H.264+[1]

Delivering high quality video without straining the network, Smart H.264+ is the optimized implementation of H.264. The Smart H.264+ encoding platform includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing a savings of up to 70% of bandwidth and storage when compared with standard H.264.

Protection

The camera allows for ±10% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

1. Firmware update required for Smart H.264+ support.

ONVIF PSIA

Technical Specification

Camera

Image Sensor	1/3-in. 4 MP Progressive CMOS
Effective Pixels	2688(H) x 1520(V)
RAM/ROM	256 MB / 16 MB
Scanning System	Progressive
Minimum Illumination	Color: 0.1 Lux at F1.4 0 Lux at F1.4 (IR on)
S/N Ratio	More than 50 dB
IR Distance	Distance up to 30 m (98 ft)
IR On/Off Control	Auto, Manual
IR LEDs	Two (2)

Lens

Lens Type	Motorized
Mount Type	Board-in
Focal Length	2.7 mm to 12 mm
Max. Aperture	F1.4
Angle of View	Horizontal: 35° to 100° Vertical: 20° to 54°
Focus Control	Auto
Close Focus Distance	0.3 m

Range

Pan/Tilt	Pan: 0° to 355° Tilt: 0° to 75° Rotation: 0° to 355°

Video

Compression		Smart H.264+[1], H.264
Streaming Capability		Two (2) 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), CIF (352 x 240)
Frame Rate	Main Stream	4 MP at 20 fps or 2 MP at 30 fps
	Sub Stream	D1, CIF at 30 fps
Bit Rate Control		CBR, VBR
Bit Rate		H264:24 K to 8192 Kbps
Day/Night		Auto (ICR), Color, B/W
BLC Mode		BLC, HLC, 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°
Mirror	Off, On
Privacy Masking	Off, On (4 Area, 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
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users / 20 Users
Edge Storage	NAS (Network Attached Storage) Local PC for instant recording Micro SD Card, max. 128 GB
Web Viewer	IE, Firefox, Safari
Management Software	Smart PSS, DSS
Mobile Operating System	IOS, Android

Certifications

Safety	UL 60950-1
Electromagnetic Compatibility (EMC)	FCC Part 15 Subpart B

Electrical

Power Supply	DC12V, PoE (802.3af, Class 0)
Power Consumption	< 9.75 W

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1. Firmware update required for Smart H.264+ support.

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	Φ122.0 mm × 88.90 mm (Φ4.80 in. x 3.50 in.)
Net Weight	0.40 kg (0.88 lb)
Gross Weight	0.54 kg (1.19 lb)

Ordering Information

Type	Part Number	Description
4 MP Camera	N42AM3Z	4 MP WDR IR Dome Network Camera
Accessories (optional)	PFA137	Junction box
	PFB203W	Wall mount
	PFA152	Pole mount
	PFB200C	In-ceiling mount

Accessories

Optional:

PFA137 Junction Box   PFB203W Wall Mount   PFA152 Pole Mount   PFB200C In-ceiling Mount

Junction Mount	Inceiling Mount
PFA137	PFB200C
Wall Mount	**Pole Mount**
PFB203W	PFB203W + PFA152

Dimensions (mm/inch)

122.0 mm (4.80 in.)
89.9 mm (3.50 in.)
ø122.0 mm (ø4.80 in.)
3 x ø4.50 mm (ø0.18 in.)
ø110.0 mm (ø4.33 in.)