Camera with embedded Network Optix VMS Server

8MP IR Varifocal Dome Network Camera

Camera with an embedded Network Optix VMS server, enabling local video management directly within the camera. This provides a cost-effective and scalable solution with high performance, advanced analytics, and seamless integration without the need for an external server. All cameras with embedded Network Optix can be connected to a single unified view, delivering a consistent, clear, and easy-to-manage surveillance system through one common interface. NX Recording license, SD Card purchase separately.

Key Features

- 1/2.8" STARVIS™ CMOS

- Max. 8MP(3840 × 2160) @25/30 fps resolution

- 2.7 to 12 mm motorized lens

- Supports face, human, and vehicle detection & capture.

- Supports human and vehicle attribute detection.

- Intelligent analytics: Intrusion, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection, and people counting.

- True WDR (120dB), 3D DNR, ROI, Defog, HLC

- Smart IR distance up to 40 m

- 1/1 audio input/output, 1/1 alarm input/output

- Built-in micro SD card slot

- IP67, IK10-rated housing

Specification

Camera

Image Sensor	1/2.8" Progressive Scan CMOS
Max. Resolution	8MP, 3840(H) × 2160(V)
Shutter Speed	1/5 to 1/20,000 s
Min. illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0.001 Lux @ (F1.6, AGC ON), Lux with IR on
Day & Night	Auto (ICR)
Angle Adjustment	Pan: 0˚ to 355˚, Tilt: 0˚ to 75˚, Rotation: 0˚ to 355˚

Lens

Lens Type	Varifocal lens, Motorized focal
Iris	Auto Iris
Focal Length	2.7 to 12 mm
Max. Aperture	F1.6
Field of View (FOV)	H: 100° to 31.7°, V: 53° to 17.8°

Illuminator

Type	IR
IR wavelength	850 nm
Distance	Up to 40 m (131.2 ft)
Control	Auto/Manual

Intelligent Analytics

AI Multi-Target	- Supports face, human, and vehicle detection & capture - Supports human and vehicle attribute detection - Supports multiple frame modes: Full Frame, Four-Corner Frame, Mosaic
Attribute Extraction	Human Attributes: Gender, age, glasses, hat, bag, upper clothing color & style, lower clothing color & style, reflective vest Vehicle Attributes: Type, color, brand, orientation
Intelligent Analysis	Intrusion detection, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection - Supports accurate target classification (human/vehicle)
People Counting	Supported

Video and Audio

Number of Streams	3 Streams
Resolution	Stream1: 3840 × 2160, 2592 × 1944, 2592 × 1520, 2560 × 1440, 2304 × 1296, 1920 × 1080, 1280 × 720 Stream2: D1, VGA, CIF Stream3: VGA, CIF, QVGA

Frame Rate	Up to 25/30 fps
Bit Rate Control	CBR/VBR
Bit Rate	Stream1: 100 kbps to 16 Mbps Stream2: 100 kbps to 6 Mbps Stream3: 100 kbps to 3 Mbps
Region of Interest (ROI)	8 areas
Smart Encoding	Supported
Audio Compression	G.711 A-law, G.711 µ-law, RAW_PCM
Audio Bit Rate	64 Kbps (G.711), 128 Kbps (RAW_PCM)

Image	
Image Adjustment	Brightness, Sharpness, Contrast, Saturation
Scene Mode	Indoor, Outdoor, Mirror, Corridor Mode
Exposure Mode	Auto, Manual, Shutter priority
White Balance	Auto, Tungsten, Fluorescent, Daylight, Shadow, Manual
Day/Night Setting	Auto, Day mode, Night mode, Timer
Noise Reduction	2D/3D DNR
Image Enhancement	WDR, HLC, BLC, Defog
Wide Dynamic Range	True WDR (120dB)
Privacy Masking	4 areas

Event	
Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Day/Night switch alarm, Abnormal sound detection
Event Actions	Alarm record, SMTP upload, FTP upload, Alarm output, Audible alarm output

Network	
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTCP/RTP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, ICMP, IGMP, SMTP, 802.1x, SNMP, Multicast
Interoperability	ONVIF (Profile S/T/G/M), SDK, CGI
Max Concurrent Streams	10 channels
User/Host Level	32+ users, 3 levels: Administrator, Operator, Media user
Security	IP address filter, HTTPS, Illegal login lock, IEEE 802.1x
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge

Security	
OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware

User Authentication	Digest authentication, Prevent brute-force attack
Network Authentication	IEEE 802.1X (EAP-TLS)
Secure Communication	HTTPS, WSS (WebSocket Secure), SRTP
Access Control	IP-based access control, Auto logout
Data Protect	Encryption credentials
Audit	Access / System / Event Log management
Secure Storage	SDcard partition encrypt (AES-256), Secure element
Supply Chain Security	SBOM

Interface

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Network Interface	1 × Ethernet (10/100 Base-T), RJ-45 connector
Audio Interface	1 × Input; 1 × Output
Alarm Interface	1 × Input; 1 × Output
SD Card Slot	Built-in, up to 1TB
Reset Button	Supported

General

Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	12 VDC (-15% to +25%)/PoE (802.3af)
Power Consumption	Max 8.5 W
Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Operating Humidity	0 to 95% RH (non-condensing)
Ingress Protection	IP67 (housing), IK10
Certifications	CE/FCC
Material	Aluminum alloy body, bubble: plastic
Dimensions	ϕ130 × 113.3 mm (ϕ5.12 × 4.46 inch)
Net Weight	Approx. 0.8 kg (1.76 lb)

DORI Distance (EN62676-4 standard)

Detect	94 to 274 m (308.4 to 899.0 ft)
Observe	37.6 to 109.6 m (123.4 to 359.6 ft)
Recognize	18.8 to 54.8 m (61.7 to 179.8 ft)
Identify	9.4 to 27.4 m (30.8 to 89.9 ft)

Dimensions (mm)

Ø130.0 [5.12"]
Ø123.2 [4.85"]
113.3 [4.46"]
59.3 [2.33"]
Ø96.0 [Ø3.78"]

3-Ø4.5 [Ø0.18"]
Ø110.0 [Ø4.33"]
123.0°
100.0°
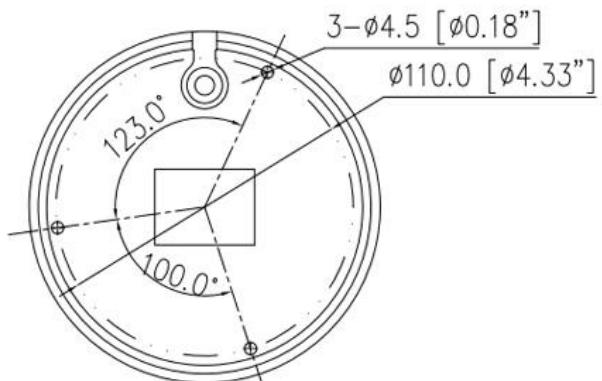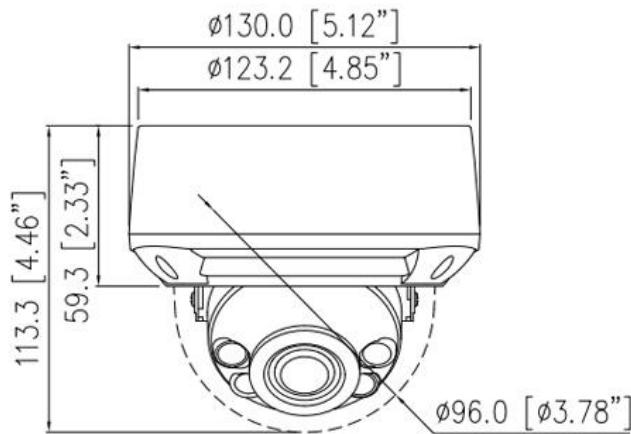
Accessories

Optional:

20125331
Junction Box

20125332
Pendant Cap

20125333
Ceiling Mount

Recessed Mount

20125334
Wall Mount

Wall Mount

20123531
Pole Mount

20123532
Corner Mount