

SN-PMD2043DN-Z40

4MP 40x Starlight Network Camera Module



Key Features

- 1/2.8" STARVIS™ CMOS
- Max. 4MP (2592×1520)@25/30 fps resolution, 40x optical zoom, 16x digital zoom
- 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, smoke and flame detection, and people counting.
- True WDR(120dB), 3D DNR, ICR, Defog and EIS
- 1/1 audio input/output, 1/1 alarm input/output
- Support ONVIF, access third party

Specifications

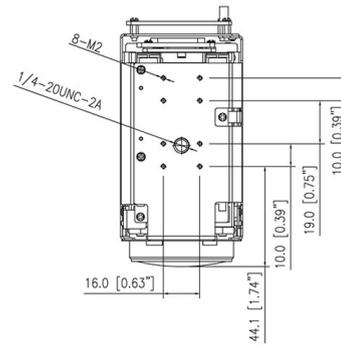
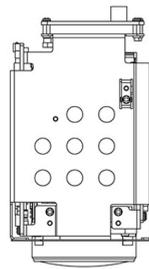
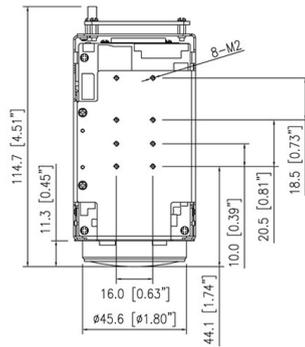
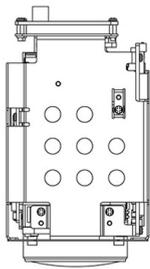
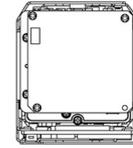
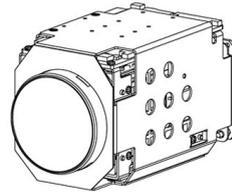
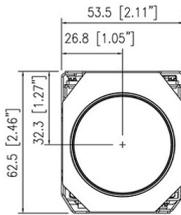
Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Max Resolution	2592(H) × 1520(V)
Shutter Speed	1/5 to 1/20,000s
Min Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0.001 Lux @ (F1.6, AGC ON)
Day & Night	Auto (ICR)
S/N Ratio	55 dB
Lens	
Focal Length	5.0 to 200 mm
Max. Aperture	F1.68 to F5
Field of View (FOV)	H: 64.9° to 1.8°, V: 40.6° to 1.1°
Optical Zoom	40x
Digital Zoom	16x
Iris	Auto/Manual
Focus Control	Auto/Manual/Semi-automatic
Intelligent Analytics	
Multi-Object Detection	<ul style="list-style-type: none"> - 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)
Smoke and Flame Detection	Supported
People Counting	Supported
Video & Audio	
Number of Streams	3 Streams
Resolution	Stream1: 2592×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 Stream2: D1, VGA, CIF Stream3: VGA, CIF, QVGA
Frame Rate	Up to 25/30fps
Bit Rate Control	CBR/VBR

Bit Rate	Stream1: 200 Kbps to 16 Mbps Stream2: 100 Kbps to 6 Mbps Stream3: 100 Kbps to 3 Mbps
Smart Encoding	Supported
Region of Interest (ROI)	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 adjustable
Scene Mode	Indoor, Outdoor, Mirror
Exposure Mode	Auto, Manual, Shutter priority, Iris priority
White Balance	Auto, Tungsten, Fluorescent, Daylight, Shadow, Manual
Day/Night Setting	Auto, Day, Night, Timer
Noise Reduction	2D/3D DNR
Image Enhancement	HLC, BLC, Defog, WDR, Anti-shake
Wide Dynamic Range	True WDR (120dB)
Privacy Masking	Up to 8 zones, mask color configurable
Event	
Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Day/Night switch alarm, Abnormal sound detection
Event Actions	Alarm record, Alarm output, FTP upload, SMTP upload, Snapshot, 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
Application Programming Interface	ONVIF (Profile S/T/G/M), SDK, CGI
Max Concurrent Streams	10 channels
User/Host Level	32+ users, 3 levels: Administrator, Operator, Media user
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Security	
OS / Firmware Protect	Encrypted firmware, 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	
Network Interface	1 × Ethernet (10/100 Base-T), RJ-45 connector
Audio Interface	1ch input, 1ch output
Alarm Interface	1ch input, 1ch output
RS-485	Supported
CVBS Output	Supported
SD Card Slot	Built-in microSD card slot, up to 1 TB
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 ± 20%
Power Consumption	Static: 4.5 W, Dynamic: 6.4 W
Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Operating Humidity	Less than 90% RH (no condensation)
Ingress Protection	N/A
Certifications	CE-EMC - EN 55032, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC 47 CFR Part 15 Subpart B
Material	Metal
Dimensions	114.7 × 53.5 × 62.5 mm (4.51 × 2.11 × 2.46 inch)
Net Weight	Approx. 0.38 kg (0.84 lb)
DORI Distance (EN62676-4 standard)	
Detect	82 to 3,280 m (269.03 to 10,761.15 ft)
Observe	32.8 to 1,312 m (107.61 to 4,304.46 ft)
Recognize	16.4 to 656 m (53.81 to 2,152.23 ft)
Identify	8.2 to 328 m (26.9 to 1,076.12 ft)

Dimensions (mm)

Unit:mm



Remarks: The left and right side screws can penetrate into the structure 3.5mm (including wall thickness). Therefore, when fixing the camera through the side, it is necessary to select the appropriate screw length to prevent the screw from reaching the internal components.