



SN-IPS8681WDR-Z40-C

7-inch 8MP 40x Ultra Starlight IR Network PTZ Camera



Key Features

- 1/1.8" STARVIS™ CMOS
- Max. 25/30 fps@3840 × 2160
- 40x optical zoom and 16x digital zoom
- Supports detection and capture of faces, humans, and vehicles, along with smoke and flame detection.
- Supports intelligent analysis for intrusion, single / double line crossing, loitering, wrong-way detection, illegal parking, smart motion detection, and people counting
- Auto tracking and perimeter protection based on deep learning
- True WDR, 3D DNR, ICR, Defog and EIS
- Smart IR distance up to 500 m
- TPM, FIPS 140-3 level 3 compliant
- IP66



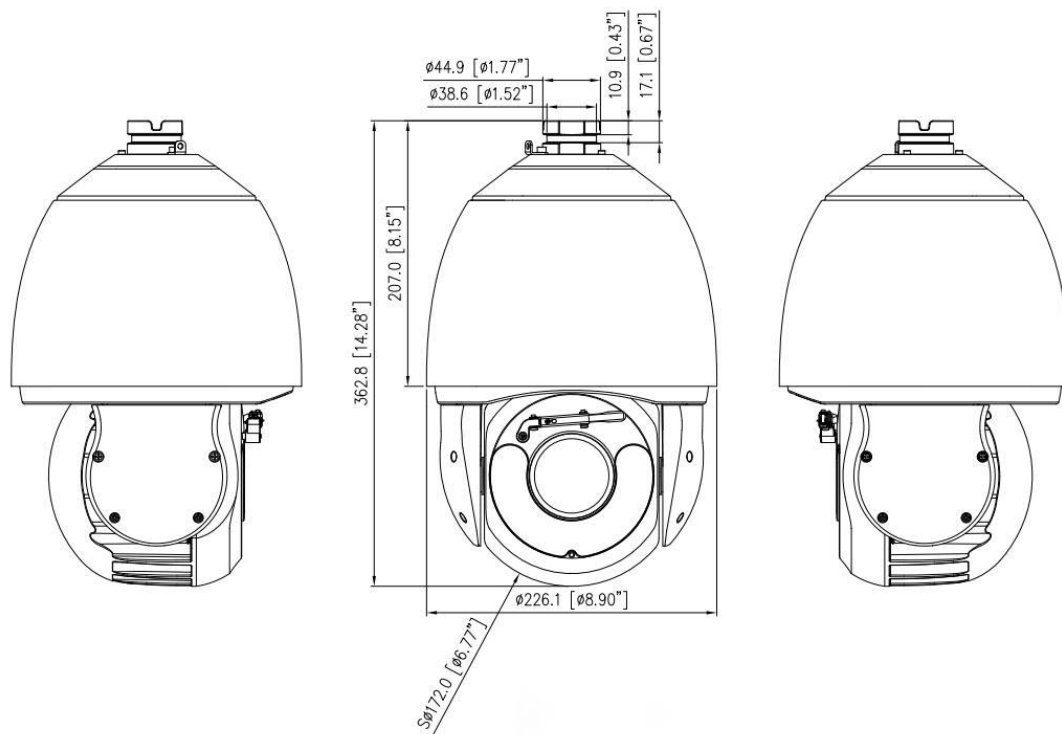
Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	3840(H) × 2160 (V)
Electronic Shutter	Auto/Manual, 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), 0 Lux with IR on
Day & Night	Auto (ICR)
Wide Dynamic Range	True WDR
Wiper	Support
Lens	
Focal Length	6.8 to 272 mm
Max. Aperture	F1.63 to F4.94
Angle of View	H: 62.0° to 2.4°, V: 36.6° to 1.3°
Optical Zoom	40x
Digital Zoom	16x
Iris Control	Auto/Manual
Focus Control	Auto/Manual/Semi-automatic
DORI	
Detection	140 to 5,600 m (459.32 to 18,372.7 ft)
Observe	56 to 2,240 m (183.73 to 7,349.08 ft)
Recognize	28 to 1,120 m (91.86 to 3,674.54 ft)
Identify	14 to 560 m (45.93 to 1,837.27 ft)
DORI (Detect, Observe, Recognize, and Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances.	
Illuminator	
Illuminator Type	IR
Illumination Distance	IR distance up to 500 m (1,640.4 ft)
Illuminator On/Off Control	Auto/Manual
IR wavelength	850 nm
Intelligent Analytics	
Multi-Object Detection	Support face, human, vehicle detection and capture Supports multiple frame modes: Full Frame, Four-corner Frame, and Mosaic.
Smoke and Flame Detection	Support
Intelligent Analysis	Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way detection, Illegal parking, Smart motion detection (support the accurate detection of vehicle and human)
People Counting	Support
Smart Tracking	Support

PTZ	
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: -10° to +90° (auto-flip)
Pan Speed	Pan speed: 0.1° to 300°/s, preset speed: 300°/s
Tilt Speed	Tilt speed: 0.1° to 300°/s, preset speed: 300°/s
Presets	400
Patrol Scan	6 Track, 12 Scan, 12 Patrol (up to 32 presets each patrol)
Power-Off Memory	Support
3D Positioning	Support
PTZ Status Display	Support
Idle Motion	The time can be set (1-240 minutes), and functions such as preset positions, patrols, scans, and tracks can be run.
Video and Audio	
Streaming Capability	3 Streams
Stream/Frame Rate	Stream1: 3840×2160, 2592×1520, 2304×1296, 1920×1080, 1280×720 @25/30fps Stream2: D1, VGA, CIF @25/30fps Stream3: VGA, CIF, QVGA @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 Encoder	Support
Region of Interest (ROI)	Support
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
Privacy Masking	Support 40 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, Audible alarm output
Network	
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTP/RTCP, 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
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
Security Certificate	Secure element(FIPS 140-3 level 3)
Interface	
Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch Input, 1ch Output
Alarm Interface	7ch Input, 2ch Output
RS-485	Support
BNC Interface	1 BNC (CVBS output)
SD Card Slot	Built-in, up to 1 TB
General	
Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	24 VAC / 36 VDC / PoE++ (802.3bt), Standard Equipped: 36VDC
Power Consumption	Less than 48 W
Operating Temperature	-40°C to 60°C (-40°F to 140 °F)
Operating Humidity	Less than 90% RH
Ingress Protection	IP66
Certifications	CE-EMC - EN 55032, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 CE-LVD - EN IEC 62368-1 FCC 47 CFR Part 15 Subpart B
Material	Metal
Dimensions	φ226.1 × 362.8 mm (φ8.9 × 14.28 inch)
Net Weight	5.5 kg (12.13 lb)

Dimensions (mm)



Accessories

Optional:



SN-CBK506B
Wall Bracket



SN-BK348A
Ceiling Bracket



SN-BK605
Corner Mount



SN-BK604B
Pole Mount



SN-BK367
Junction Box



SN-BK358
Corner Mount



SN-BK359
Pole Mount