



# SN-IPS8643WDR-Z40

7-inch 4MP 40x Starlight IR Network PTZ Camera



## Key Features

- 1/2.8" STARVIS™ CMOS
- Max. 25/30 fps@2592 × 1520
- 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
- Gyroscope stabilization for stable picture
- Smart IR distance up to 300 m
- IP66



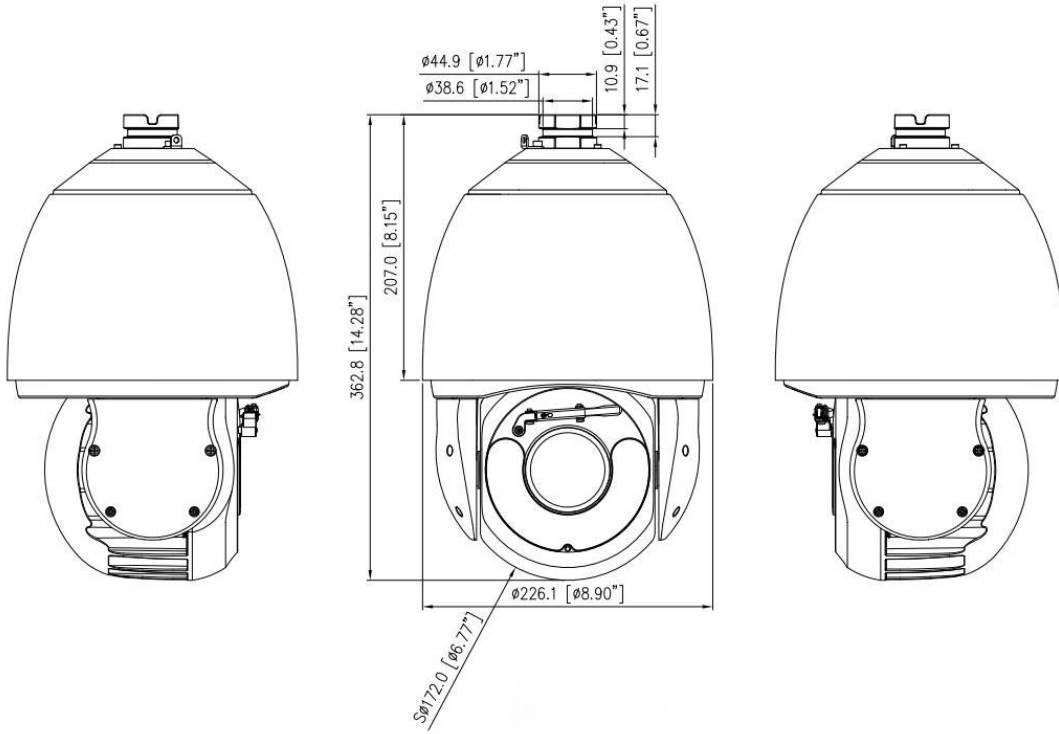
## Specification

Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Max. Resolution	2592(H) × 1520 (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
Day & Night	Auto (ICR)
Wide Dynamic Range	True WDR
Wiper	Support
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 Control	Auto/Manual
Focus Control	Auto/Manual/Semi-automatic
DORI Distance	
Detection	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)
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 300 m (984.3 ft)
Illumination 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, and Smart motion detection (support the accurate detection of vehicle and human)
People Counting	Support
Smart Tracking	Support
<b>PTZ</b>	
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.
<b>Video and Audio</b>	
Streaming Capability	3 Streams
Stream/Frame Rate	Stream1: 2592×1520, 2560×1440, 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)
<b>Image</b>	
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
<b>Event</b>	
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
<b>Network</b>	
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
<b>Interface</b>	
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
<b>General</b>	
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 45 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