

SN-IPS8681WDR-Z40

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
- IP66

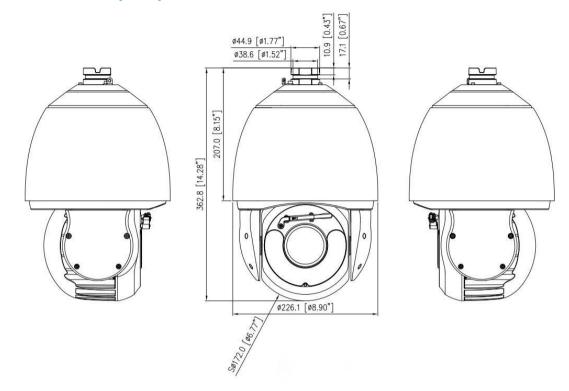
Specification

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)	
Illuminator		
Illuminator Type	IR	
Illumination Distance	IR distance up to 500 m (1,640.4 ft)	
Illuminator On/Off Control	Auto/Manual	
Intelligent Analytics		
Multi-Object Detection	Support face, human, vehicle detection and capture	
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)	

Finant Tracking Support Fize Part/filt Range Pan: 0° to 360° encless, Tilt: 10° to 490° (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 Partol Scan 6 Track, 12 Scan, 12 Patrol (up to 32 presets each patrol) Power Off Memory Support 3D Positioning Support Itle Line can be set (1:240 minutes), and functions such as preset positions, patrols, scans, and tracks and ber un. Videoand Audio The time can be set (1:240 minutes), and functions such as preset positions, patrols, scans, and tracks and ber un. Streaming Capability 3 Stream: 3400-2160, 2592+1520, 2304×1296, 1920×1080, 1280×720 @25/30fps Streaming Capability 5 reaming 10, 100 Kgb to 16 Mbps Bit Rate Control CBR/VBR Bit Rate Control Support Region of Interest (ROI) Support Region of Interest (ROI) Support Region of Interest (ROI) 4 Kbps (G-711), 128 kbps (RAW_PCM) Image Adjustment Brightness, Sharpness, Contrast, Saturation adjustable Mirror Support	People Counting	Support
Pan: 0' to 360' endless, Tilt: -10' to +90' (auto-flip) Pan Speed Pan: 9' 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 Video and Audio Streami/Frame Rate Stream: 3840×2160, 2592×1520, 2304×1296, 1920×1080, 1280×720 @25/30fps Streami/Frame Rate Stream: 501, VGA, CIF @25/30fps Streami Stream: 200 kbps to 16 Mbps Stream: 100 kbps to 16 Mbps Stream: 100 kbps to 16 Mbps Stream: 100 kbps to 3 Mbps Stream: 100 kbps to 16 Mbps Stre	Smart Tracking	Support
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 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 Streami/Frame Rate Stream: 3840×2160, 2592×1520, 2304×1296, 1920×1080, 1280×720 @25/30fps Stream/Frame Rate Stream: 201 VGA, CIF @75/30fps Stream: 201 VGA, CIF	PTZ	
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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 Streamin: 3840×2160, 2592×1520, 2304×1296, 1920×1080, 1280×720 @25/30fps Streaming: 20 I, VGA, CIF, @25/30fps Streaming: 100 kdps to 16 Mbps Streaming: 100 kdps to 16 Mbps Streaming: 200 kdps to 16 Mbps Streaming: 100 kdps to 3 Mbps Streaming: 100 kdps 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 kdps (G.711), 128 kdps (RAW_PCM) Image Adjustment Birghtness, Sharpness, Contrast, Saturation adjustable Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction HLC, BLC, Defog, WDR, Anti-shake	Presets	400
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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 Bit Rate Control CBR/VBR Bit Rate Stream1: 200 kbps to 16 Mbps Stream2: 100 kbps to 6 Mbps Stream3: 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 Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	3D Positioning	Support
Video and Audio Streaming Capability 3 Streams Stream: 3840×2160, 2592×1520, 2304×1296, 1920×1080, 1280×720 @25/30fps Stream: VGA, CIF, QVGA @25/30fps Bit Rate Control CBR/VBR Stream:: 200 kbps to 16 Mbps Stream:: 100 kbps to 6 Mbps Stream:: 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 Inage Adjustment Brightness, Sharpness, Contrast, Saturation adjustable Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction Ed. Auto, Defog, WDR, Anti-shake Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	PTZ Status Display	Support
Streaming Capability Stream: 3840×2160, 2592×1520, 2304×1296, 1920×1080, 1280×720 @25/30fps Stream: D1, VGA, CIF, QVGA @25/30fps Stream: VGA, CIF, QVGA @25/30fps Bit Rate Control CBR/VBR Stream: 100 kbps to 16 Mbps Stream: 100 kbps to 3 Mbps Stream: 100 kbps to 3 Mbps Smart Encoder Support Region of Interest (ROI) 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 Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction Brightnesm, ShC, Defog, WDR, Anti-shake	Idle Motion	
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Stream/Frame RateStream2: D1, VGA, CIF @25/30fpsBit Rate ControlCBR/VBRBit RateStream1: 200 kbps to 16 Mbps Stream3: 100 kbps to 3 MbpsSmart EncoderSupportRegion of Interest (ROI)SupportAudio CompressionG.711 A-law, G.711 μ-law, RAW_PCMAudio Bit Rate64 kbps (G.711), 128 kbps (RAW_PCM)ImageImage AdjustmentBrightness, Sharpness, Contrast, Saturation adjustableMirrorSupportExposure ModeAuto/ManualWhite BalanceAuto/ManualDay/Night SettingAuto, Day, Night, TimeNoise Reduction2D/3D DNRImage EnhancementHLC, BLC, Defog, WDR, Anti-shake	Streaming Capability	3 Streams
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) 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 Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual White Balance Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Stream/Frame Rate	Stream2: D1, VGA, CIF @25/30fps
Bit RateStream2: 100 kbps to 6 Mbps Stream3: 100 kbps to 3 MbpsSmart EncoderSupportRegion of Interest (ROI)SupportAudio CompressionG.711 A-law, G.711 μ-law, RAW_PCMAudio Bit Rate64 kbps (G.711), 128 kbps (RAW_PCM)ImageImage AdjustmentBrightness, Sharpness, Contrast, Saturation adjustableMirrorSupportExposure ModeAuto/ManualWhite BalanceAuto/ManualDay/Night SettingAuto, Day, Night, TimeNoise Reduction2D/3D DNRImage EnhancementHLC, BLC, Defog, WDR, Anti-shake	Bit Rate Control	CBR/VBR
Region of Interest (ROI) 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 Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Bit Rate	Stream2: 100 kbps to 6 Mbps
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 Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction Day/Suphaneement HLC, BLC, Defog, WDR, Anti-shake	Smart Encoder	Support
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Image Adjustment Brightness, Sharpness, Contrast, Saturation adjustable Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Audio Compression	G.711 A-law, G.711 μ-law, RAW_PCM
Image Adjustment Brightness, Sharpness, Contrast, Saturation adjustable Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Audio Bit Rate	64 kbps (G.711), 128 kbps (RAW_PCM)
Mirror Support Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Image	
Exposure Mode Auto/Manual White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Image Adjustment	Brightness, Sharpness, Contrast, Saturation adjustable
White Balance Auto/Manual Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Mirror	Support
Day/Night Setting Auto, Day, Night, Time Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Exposure Mode	Auto/Manual
Noise Reduction 2D/3D DNR Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	White Balance	Auto/Manual
Image Enhancement HLC, BLC, Defog, WDR, Anti-shake	Day/Night Setting	Auto, Day, Night, Time
	Noise Reduction	2D/3D DNR
Privacy Masking Support 40 zones, mask color configurable	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, Abnormal sound detection
Alarm Events	Alarm record, Alarm output, FTP upload, SMTP upload, 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
User/Host Level	Up to 10 users, 3 levels: Administrator, Operator, Media user
Security	IP address filter, encrypted HTTPS, Illegal login lock, IEEE 802.1x
Web Viewer	<ie11, chrome,="" edge<="" firefox,="" microsoft="" td=""></ie11,>
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, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian. Default: English
Power Supply	24VAC/36VDC/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 55032:2015+A1:2020, EN IEC 61000-6-3:2021, EN IEC 61000-3-2:2019+A12021, EN 61000-3-3:2013+A2:2021, EN 55035:2017+A11:2020, EN 50130-4:2011+A1:2014) CE-LVD (EN 62368-1:2014+A11:2017) FCC (FCC 47 CFR 15, Subpart B, ANSI C63.4-2014)
Material	Metal
Dimensions	ϕ 226.1 × 362.8 mm (ϕ 8.9 × 14.28 inch)
Net Weight	5.5 kg (12.13 lb)

Dimensions (mm)



Accessories

Optional:

