

# SN-CHP8681EBR(-K)-Z4...

8MP 40x Starlight IR Explosion-proof Network Camera



## Key Features

- 1/1.8" STARVIS™ CMOS
- Max. 8MP(3840×2160) @25/30fps 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, 3D DNR, ICR, HLC, BLC, Defog
- IR distance up to 200 m
- Fiber optic interface (-K models only)
- Material: 316L Stainless steel, IP68 water resistant
- ATEX: II 2 G Ex db IIC T6 Gb, Ex II 2 D Ex tb IIIC T80°C Db

## Specifications

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max Resolution	8MP, 3840(H) × 2160 (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), 0 Lux with IR on
Day & Night	Auto (ICR)
Lens	
Focal Length	6.8 to 272 mm
Max. Aperture	F1.63 to F4.94
Field of View (FOV)	H: 62.0° to 2.4°, V: 36.6° to 1.3°
Optical Zoom	40x
Digital Zoom	16x
Iris	Auto/Manual
Focus Control	Auto/Manual/Semi-automatic
Illuminator	
Type	IR
IR wavelength	850 nm
Distance	Up to 200 m (656.2 ft)
Control	Auto / Manual
Intelligent Analytics	
Multi-Object Detection	<ul style="list-style-type: none"> <li>- Supports face, human, and vehicle detection &amp; capture;</li> <li>- Supports human and vehicle attribute detection;</li> <li>- Supports multiple frame modes: Full Frame, Four-Corner Frame, Mosaic.</li> </ul>
Attribute Extraction	<p>Human Attributes: Gender, age, glasses, hat, bag, upper clothing color &amp; style, lower clothing color &amp; style, reflective vest.</p> <p>Vehicle Attributes: Type, color, brand, orientation</p>
Intelligent Analysis	<p>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.</p> <ul style="list-style-type: none"> <li>- Supports accurate target classification (human/vehicle)</li> </ul>
Smoke and Flame Detection	Supported
People Counting	Supported
Video & Audio	
Number of Streams	3 Streams

Resolution	Stream1: 3840×2160, 2592×1520, 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)
<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
Wide Dynamic Range	True WDR (120dB)
Privacy Masking	Support 8 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, Snapshot, Audible alarm output
<b>Network</b>	
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
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
<b>Security</b>	
OS / Firmware Protect	Encrypted firmware, Signed firmware
User Authentication	Encrypted firmware, Secure boot, Signed firmware
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 × RJ-45, 10/100 Mbps self-adaptive Ethernet port
Fiber Interface	Optional (-K model): - 1 × 10/100 Mbps single-mode, single-fiber port
Audio Interface	1 × input, 1 × output
Alarm Interface	2 × input, 1 × output
RS-485	Supported
CVBS Output	1ch BNC
SD Card Slot	MicroSD card slot (max. 1 TB) *Memory card must be factory pre-installed and is not field-installable.
Reset Button	Supported

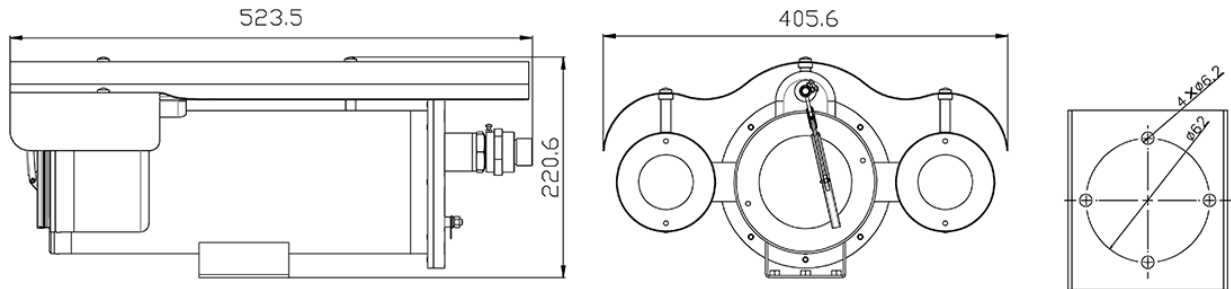
### General

Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	100 to 240VAC
Power Consumption	Less than 36W
Operating Temperature	-40°C to 60°C (-40°F to 140 °F)
Operating Humidity	Less than 95% RH
Ingress Protection	IP68
Wiper	Supported
Certifications	ATEX: Ex II 2GD Ex db IIC T6 Gb /Ex tb IIIC T80°C Db; IECEX: Ex db IIC T6 Gb /Ex tb IIIC T80°C Db
Material	SUS316L
Dimensions	523.5 × 405.6 × 220.6 mm (20.6 × 16 × 8.7 inch)
Net Weight	18 kg (39.68 lb)

### DORI Distance (EN62676-4 standard)

Detect	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)

## Dimensions (mm)



## Accessories

### Optional:



SN-BK401A-SS  
Wall Mount



SN-BK406-SS  
Pole Mount



SN-BK407-SS  
Corner Mount



SN-BK400-SS(P/F/D)  
Junction Box



SN-CPL10A-SS  
Washing Tank



Flexible Tube