

# SN-IPR8084BZAN-VZ

8MP Starlight IR Varifocal Bullet Network Camera



## Key Features

- 1/1.8" STARVIS™ CMOS, up to 8MP (3840 × 2160) @ 25/30 fps
- 3.6 to 11 mm motorized focal lens
- Supports face, human, and vehicle detection with snapshot capture
- Supports human and vehicle attribute analysis
- 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, and people counting.
- True WDR (120dB), 3D DNR, ROI, Defog, HLC
- Smart IR distance up to 50 m
- 1/1 audio input/output, 1/1 alarm input/output
- Built-in microSD card slot (up to 1 TB)
- IP67-rated housing

## 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: 0.003 Lux @ (F1.3, AGC ON),<br>B/W: 0.0008 Lux @ (F1.3, AGC ON), 0 Lux with IR on                                                                                                                                                                                                                            |
| Day & Night               | Auto (ICR)                                                                                                                                                                                                                                                                                                          |
| Angle Adjustment          | Pan: 0° to 360°, Tilt: 0° to 90°, Rotation: 0° to 360°                                                                                                                                                                                                                                                              |
| Lens                      |                                                                                                                                                                                                                                                                                                                     |
| Lens Type                 | Varifocal lens, Motorized focal                                                                                                                                                                                                                                                                                     |
| Focal Length              | 3.6 to 11 mm                                                                                                                                                                                                                                                                                                        |
| Max. Aperture             | F1.3                                                                                                                                                                                                                                                                                                                |
| Field of View (FOV)       | H: 112.6° to 47.9°, V: 58.2° to 26.8°                                                                                                                                                                                                                                                                               |
| Iris                      | Auto Iris                                                                                                                                                                                                                                                                                                           |
| Illuminator               |                                                                                                                                                                                                                                                                                                                     |
| Type                      | IR                                                                                                                                                                                                                                                                                                                  |
| IR wavelength             | 850 nm                                                                                                                                                                                                                                                                                                              |
| Distance                  | Up to 50 m (164.0 ft)                                                                                                                                                                                                                                                                                               |
| Control                   | Auto/Manual                                                                                                                                                                                                                                                                                                         |
| Intelligent Analytics     |                                                                                                                                                                                                                                                                                                                     |
| AI Multi-Target Detection | <ul style="list-style-type: none"> <li>- Supports face, human, and vehicle detection with snapshot capture</li> <li>- Supports human and vehicle attribute analysis</li> <li>- Supports tracking display modes: Full Frame, Four-Corner Frame, and Mosaic</li> </ul>                                                |
| Attribute Analysis        | Human Attributes: Gender, age, glasses, hat, bag, upper clothing color & style, lower clothing color & style, reflective vest<br>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<br>- Supports alarm triggering based on specified target types (human/vehicle) |
| People Counting           | Supported                                                                                                                                                                                                                                                                                                           |
| Video & Audio             |                                                                                                                                                                                                                                                                                                                     |
| Number of Streams         | 3 Streams                                                                                                                                                                                                                                                                                                           |
| Resolution                | Stream1: 3840×2160, 2592×1944, 2592×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720<br>Stream2: D1, VGA, CIF<br>Stream3: VGA, CIF, QVGA                                                                                                                                                                             |

|                                   |                                                                                                                                                   |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Frame Rate                        | Up to 25/30fps                                                                                                                                    |
| Bit Rate Control                  | CBR/VBR                                                                                                                                           |
| Bit Rate                          | Stream1: 200 Kbps to 16 Mbps<br>Stream2: 100 Kbps to 6 Mbps<br>Stream3: 100 Kbps to 3 Mbps                                                        |
| Smart Encoding                    | Supported                                                                                                                                         |
| Region of Interest (ROI)          | Off/On (8 Zone, Rectangle)                                                                                                                        |
| Audio Compression                 | G.711 A-law, G.711 $\mu$ -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, Corridor mode                                                                                                            |
| Exposure Mode                     | Auto, Manual, Shutter 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                                                                                                                              |
| Wide Dynamic Range                | True WDR (120dB)                                                                                                                                  |
| Privacy Masking                   | 4 areas                                                                                                                                           |
| <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, Secure boot, Signed firmware                                                                                                  |
| User Authentication               | Digest authentication, Brute-force attack protection                                                                                              |
| 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, and event logs    |
| Secure Storage        | AES-256 encrypted SD card storage |
| Supply Chain Security | SBOM                              |

## Interface

|                   |                                               |
|-------------------|-----------------------------------------------|
| Network Interface | 1 × Ethernet (10/100 Base-T), RJ-45 connector |
| Audio Interface   | 1 input (3.5 mm), 1 output (3.5 mm)           |
| Alarm Interface   | 1 input, 1 output                             |
| SD Card Slot      | Built-in microSD card slot (up to 1 TB)       |
| Reset Button      | Supported                                     |

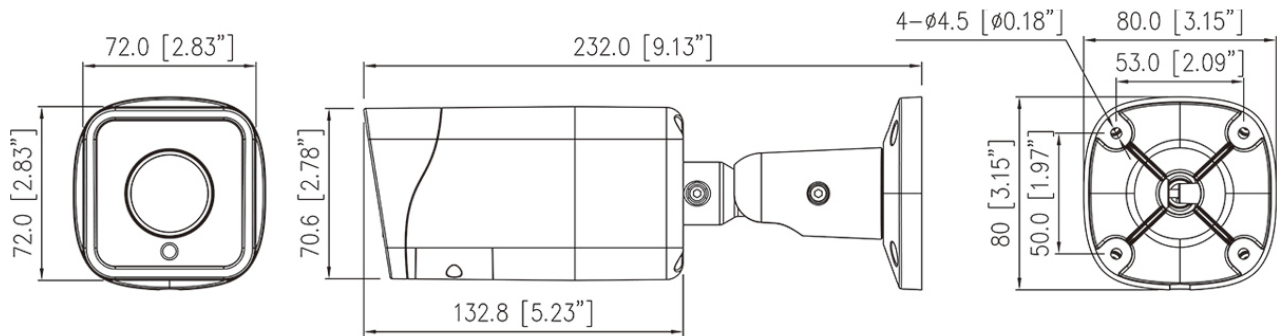
## General

|                       |                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Language              | English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English |
| Power Supply          | 12 VDC (-10% to +25%) / PoE (802.3af)                                                                                                              |
| Power Consumption     | Typical: 3.5 W (12 VDC) / approx. 4.4 W (PoE)<br>Max (IR on): 7.6 W (12 VDC) / approx. 9.5 W (PoE)                                                 |
| Operating Temperature | -40°C to 60°C (-40°F to 140°F)                                                                                                                     |
| Operating Humidity    | < 95% RH, non-condensing                                                                                                                           |
| Ingress Protection    | IP67 (housing)                                                                                                                                     |
| Certifications        | CE-EMC<br>- EN 55032, EN IEC 61000-6-4, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4<br>FCC 47 CFR Part 15 Subpart B                       |
| Material              | Aluminum alloy                                                                                                                                     |
| Dimensions            | 232 × 80 × 80 mm (9.13 × 3.15 × 3.15 inch)                                                                                                         |
| Net Weight            | Approx. 0.79 kg (1.74 lb)                                                                                                                          |

## DORI Distance (EN 62676-4 standard)

|           |                                     |
|-----------|-------------------------------------|
| Detect    | 89.1 to 189.3 m (292.4 to 621.2 ft) |
| Observe   | 35.6 to 75.7 m (116.9 to 248.5 ft)  |
| Recognize | 17.8 to 37.9 m (58.5 to 124.2 ft)   |
| Identify  | 8.9 to 18.9 m (29.2 to 62.1 ft)     |

## Dimensions (mm)

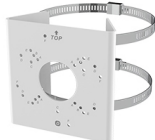


## Accessories

### Optional:



SN-CBK656A  
Junction Box



SN-CBK627D  
Pole Mount