# SN-IPV8046HDAR-VZ

**4MP IR Varifocal Turret Network Camera**



## Key Features

- 1/2.8” STARVIS™ CMOS, up to 4MP (2592 × 1520) @ 25/30 fps
- 2.7 to 12 mm motorized focal lens
- Supports face, human, and vehicle detection with snapshot capture
- 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 40 m
- Built-in microphone, 1/1 audio input/output, 1/1 alarm input/output
- Built-in microSD card slot (up to 1 TB)
- IP67-rated housing

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## Specifications

| | |
|---|---|
| **Camera** | |
| Image Sensor | 1/2.8” Progressive Scan CMOS |
| Max. Resolution | 4MP, 2592(H) × 1520(V) |
| Shutter Speed | 1/5 to 1/20,000s |
| Min. Illumination | Color: 0.005 Lux @ (F1.6, AGC ON),<br>B/W: 0.001 Lux @ (F1.6, AGC ON), 0 Lux with IR on |
| Day & Night | Auto (ICR) |
| Angle Adjustment | Pan: 0° to 360°, Tilt: 0° to 80°, Rotation: 0° to 360° |
| **Lens** | |
| Lens Type | Varifocal lens, Motorized focal |
| Focal Length | 2.7 to 12 mm |
| Max. Aperture | F1.6 |
| Field of View (FOV) | H: 95.6° to 30.7°, V: 51.4° to 17.2° |
| Iris | Auto Iris |
| **Illuminator** | |
| Illuminator Type | IR |
| IR wavelength | 850 nm |
| Illumination Distance | Up to 40 m (131.2 ft) |
| Illuminator Control | Auto/Manual |
| **Intelligent Analytics** | |
| AI Multi-Target Detection | - Supports face, human, and vehicle detection with snapshot capture<br>- Supports tracking display modes: Full Frame, Four-Corner Frame, and Mosaic |
| Intelligent Analysis | 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, and fight detection.<br>- Supports accurate human and vehicle classification |
| People Counting | Supported |
| **Video & Audio** | |
| Number of Streams | 3 Streams |
| Resolution | Stream1: 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 |

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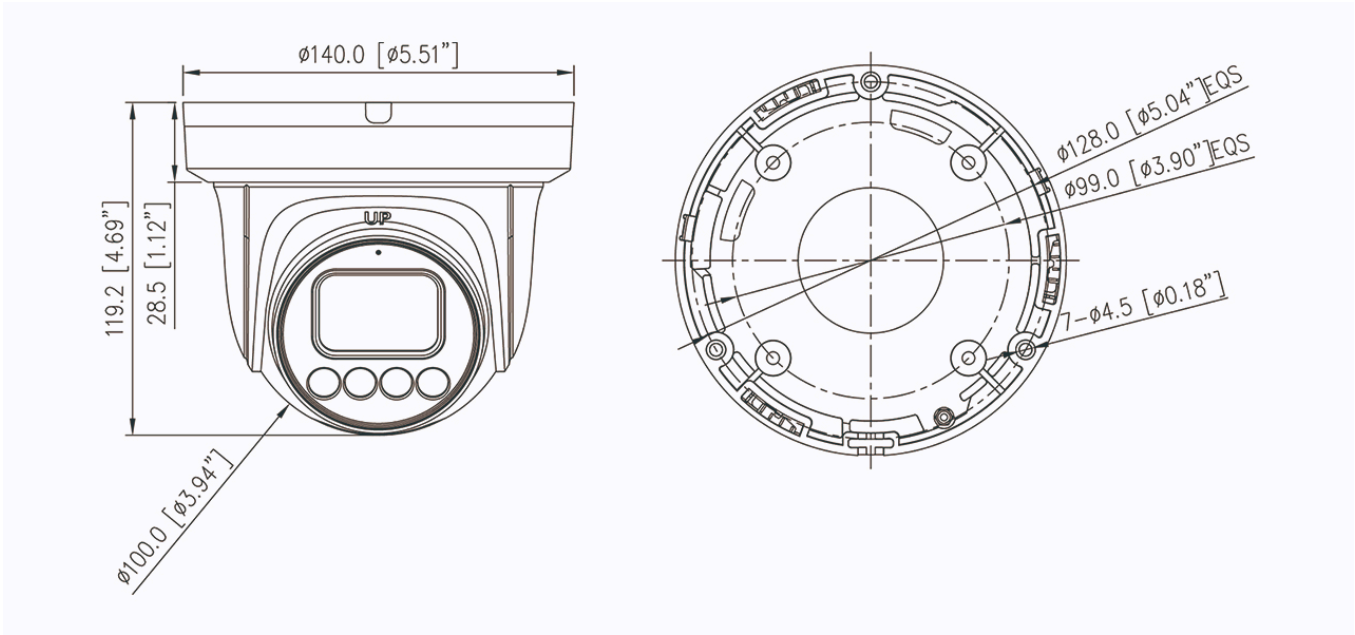
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|---|---|
| Bit Rate | Stream1: 200 Kbps to 12 Mbps<br>Stream2: 100 Kbps to 6 Mbps<br>Stream3: 100 Kbps to 3 Mbps |
| Smart Encoding | Supported |
| Region of Interest (ROI) | Off/On (8 Zone, Rectangle) |
| Audio Compression | G.711 A-law, G.711 μ-law, 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, 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 |
| **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, Email notification, Snapshot, 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 |
| 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 |
| **Security** | |
| 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 log management |
| Secure Storage | AES-256 encrypted SD card storage |

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|---|---|
| Supply Chain Security | SBOM |
| **Interface** | |
| Network Interface | 1 × Ethernet (10/100 Base-T), RJ-45 connector |
| Built-in Microphone | Supported |
| Audio Interface | 1ch Input, 1ch Output |
| Alarm Interface | 1ch Input, 1ch 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: 2.4 W (12 VDC) / approx. 3 W (PoE)<br>Max (IR on): 6 W (12 VDC) / approx. 7.5 W (PoE) |
| Operating Temperature | -40 ℃ to 60 ℃ (-40 ℉ to 140 ℉ ) |
| 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 housing; PC components |
| Dimensions | φ140 × 119.2 mm (5.51 × 4.69 inch) |
| Net Weight | Approx. 900 g (1.98 lb) |
| **DORI Distance (EN 62676-4 standard)** | |
| Detect | 67 to 198 m (219.8 to 649.6 ft) |
| Observe | 26.8 to 79.2 m (87.9 to 259.8 ft) |
| Recognize | 13.4 to 39.6 m (44.0 to 129.9 ft) |
| Identify | 6.7 to 19.8 m (22.0 to 65.0 ft) |

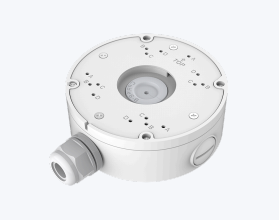
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## Dimensions (mm)




## Accessories

### Optional:



SN-CBK645G

Junction Box



SN-CBK206

Pendant Cap



SN-CBK402

Ceiling Mount Bracket



SN-CBK501

Wall Mount Bracket



SN-CBK502

Wall Mount Bracket



SN-CBK101

Pole Mount Bracket



SN-CBK102

Corner Mount Bracket

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