

SN-IPR8020AKAN-Z

2MP IR Varifocal Bullet Network Camera



Key Features

- 1/2.8" STARVIS™ CMOS
- Max. 2MP (1920×1080) @25/30fps resolution
- 2.7 to 13.5 mm, 6 to 22 mm, 5 to 50 mm motorized focal lens optional
- Supports face, human, and vehicle detection & capture.
- Intelligent analytics: Intrusion, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, and people counting.
- True WDR (120dB), 3D DNR, ROI, Defog, HLC
- Smart IR distance up to 100 m
- 1/1 audio input/output, 1/1 alarm input/output
- Built-in microSD card slot
- IP67, IK10-rated housing

Specifications

| Camera | |
|-----------------------|---|
| Image Sensor | 1/2.8" Progressive Scan CMOS |
| Max Resolution | 2MP, 1920(H) × 1080(V) |
| Shutter Speed | 1/5 to 1/20,000s |
| Min Illumination | Color: 0.01 Lux @ (F1.6, AGC ON), B/W: 0.005 Lux @ (F1.6, 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 | 2.7 to 13.5 mm, 6 to 22 mm, 5 to 50 mm optional |
| Max. Aperture | F1.6 / F1.6 / F2.0 |
| Field of View (FOV) | 2.7 to 13.5 mm: - H: 101° to 28°, V: 54° to 16° 6 to 22 mm: - H: 44.1° to 17.9°, V: 24.3° to 10.1° 5 to 50 mm: - H: 50.1° to 7.7°, V: 27.4° to 4.4° |
| Iris | Fixed Iris |
| Illuminator | |
| Type | IR |
| IR wavelength | 850 nm |
| Distance | 2.7 to 13.5 mm: - Up to 60 m (196.9 ft) 6 to 22 mm: - Up to 80 m (262.5 ft) 5 to 50 mm: - Up to 100 m (328.1 ft) |
| Control | Auto/Manual |
| Intelligent Analytics | |
| AI Multi-Target | - Supports face, human, and vehicle detection & capture. - Supports multiple frame modes: Full Frame, Four-Corner Frame, Mosaic. |
| Intelligent Analysis | Intrusion detection, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection. - Supports accurate target classification (human/vehicle) |
| People Counting | Supported |
| Video & Audio | |

| | |
|--------------------------|---|
| Number of Streams | 3 Streams |
| Resolution | Stream1: 1920×1080, 1280×720 Stream2: D1, VGA, 640×360, CIF, QVGA Stream3: VGA, CIF, QVGA |
| Frame Rate | Up to 25/30fps |
| Bit Rate Control | CBR/VBR |
| Bit Rate | Stream1: 200 Kbps to 12 Mbps Stream2: 100 Kbps to 6 Mbps 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

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|--------------------|--|
| 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

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|----------------|---|
| 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 |

Network

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|-----------------------------------|---|
| 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

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|-----------------------|---|
| OS / Firmware Protect | Encrypted firmware, Signed firmware |
| User Authentication | Digest authentication, Prevent brute-force attack |

| | |
|------------------------|--|
| 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

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|-------------------|---|
| Network Interface | 1 × Ethernet (10/100 Base-T), RJ-45 connector |
| Audio Interface | 1ch Input, 1ch Output |
| Alarm Interface | 1ch Input, 1ch Output |
| SD Card Slot | Built-in microSD card slot, up to 256GB |
| Reset Button | Supported |

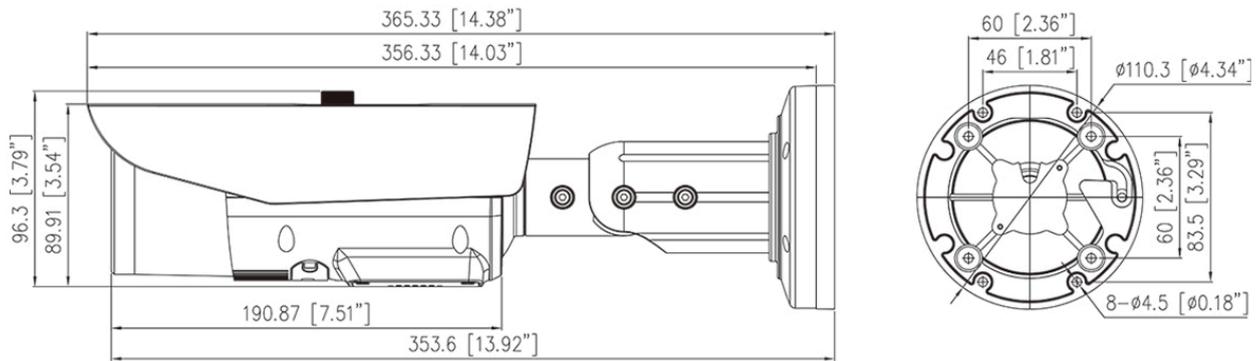
General

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|-----------------------|--|
| 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 | Basic: Max 2.5 W (IR OFF), Max 9.5 W (IR ON) |
| Operating Temperature | -40°C to 55°C (-40°F to 131°F) |
| Operating Humidity | Less than 95% RH |
| Ingress Protection | IP67 (housing), IK10 |
| Certifications | CE-EMC - EN 55032, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC 47 CFR Part 15 Subpart B |
| Material | Aluminum alloy |
| Dimensions | φ110.3 × 365.33 mm (φ4.33 × 14.38 inch) |
| Net Weight | Approx. 1.45 kg (3.2 lb) |

DORI Distance (EN62676-4 standard)

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|-----------|--|
| Detect | 2.7 to 13.5 mm: 48 to 152 m (157.5 to 498.7 ft) 5 to 50 mm: 88 to 530 m (288.7 to 1,738.8 ft) |
| Observe | 2.7 to 13.5 mm: 19.2 to 60.8 m (63 to 199.5 ft) 5 to 50 mm: 35.2 to 212 m (115.5 to 695.5 ft) |
| Recognize | 2.7 to 13.5 mm: 9.6 to 30.4 m (31.5 to 99.7 ft) 5 to 50 mm: 17.6 to 106 m (57.7 to 347.8 ft) |
| Identify | 2.7 to 13.5 mm: 4.8 to 15.2 m (15.7 to 49.9 ft) 5 to 50 mm: 8.8 to 53 m (28.9 to 173.9 ft) |

Dimensions (mm)



Accessories

Optional:



SN-CBK645G
Junction Box



SN-CBK627D
Pole Mount



SN-CBK101
Pole Mount



SN-CBK102
Corner Mount