



# SN-IPR8020AKAN-Z

2MP IR Varifocal Bullet Network Camera



## Key Features

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



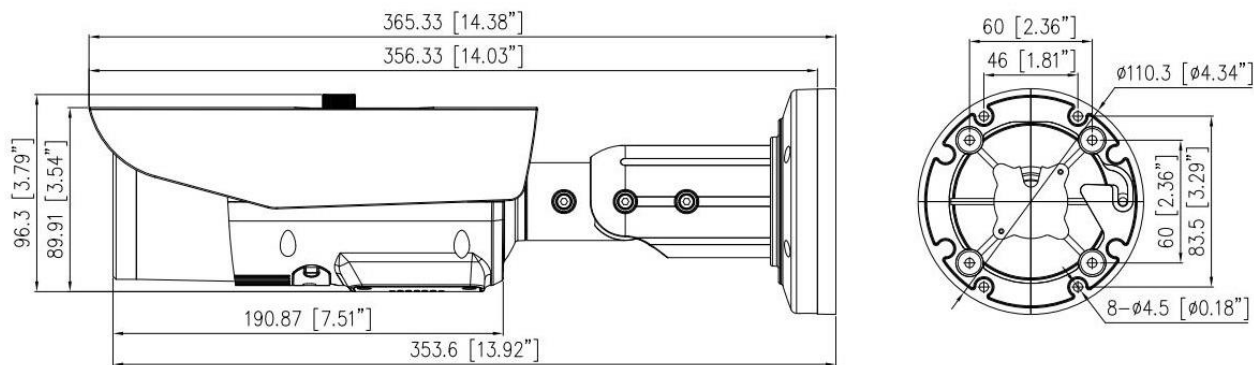
## Specification

| Camera                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Image Sensor                                                                                                                                                                                                                                                               | 1/2.8" Progressive Scan CMOS                                                                                                                                                                                                                                                                                                                                                                                                   |
| Max. Resolution                                                                                                                                                                                                                                                            | 2MP, 1920H) × 1080(V)                                                                                                                                                                                                                                                                                                                                                                                                          |
| Electronic Shutter                                                                                                                                                                                                                                                         | Auto/Manual, 1/5 to 1/20,000s                                                                                                                                                                                                                                                                                                                                                                                                  |
| Min. illumination                                                                                                                                                                                                                                                          | Color: 0.01 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR                                                                                                                                                                                                                                                                                                                                                                           |
| Day & Night                                                                                                                                                                                                                                                                | IR cut filter                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Wide Dynamic Range                                                                                                                                                                                                                                                         | True WDR                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Angle Adjustment                                                                                                                                                                                                                                                           | Pan: 0° to 360°, Tilt: 0° to 90°, Rotation: 0° to 360°                                                                                                                                                                                                                                                                                                                                                                         |
| Lens                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Lens Type                                                                                                                                                                                                                                                                  | Varifocal lens, Motorized focal                                                                                                                                                                                                                                                                                                                                                                                                |
| Iris                                                                                                                                                                                                                                                                       | Fixed Iris                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 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:<br>- H: 101° to 28°, V: 54° to 16°<br>2.7 to 13.5 mm:<br>- H: 44.1° to 17.9°, V: 24.3° to 10.1°<br>5 to 50 mm:<br>- H: 50.1° to 7.7°, V: 27.4° to 4.4°                                                                                                                                                                                                                                                         |
| DORI Distance                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| DORI Distance                                                                                                                                                                                                                                                              | 2.7 to 13.5 mm:<br>- Detect: 48 to 152 m (157.5 to 498.7 ft),<br>- Observe: 19.2 to 60.8 m (63 to 199.5 ft),<br>- Recognize: 9.6 to 30.4 m (31.5 to 99.7 ft),<br>- Identify: 4.8 to 15.2 m (15.7 to 49.9 ft);<br>5 to 50 mm:<br>- Detect: 88 to 530 m (288.7 to 1,738.8 ft),<br>- Observe: 35.2 to 212 m (115.5 to 695.5 ft),<br>- Recognize: 17.6 to 106 m (57.7 to 347.8 ft),<br>- Identify: 8.8 to 53 m (28.9 to 173.9 ft). |
| DORI (Detect, Observe, Recognize, and Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Illuminator                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Illuminator Type                                                                                                                                                                                                                                                           | IR                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Illumination Distance                                                                                                                                                                                                                                                      | 2.7 to 13.5 mm:<br>- Up to 60 m (196.9 ft)<br>6 to 22 mm:<br>- Up to 80 m (262.5 ft)<br>5 to 50 mm:<br>- Up to 100 m (328.1 ft)                                                                                                                                                                                                                                                                                                |
| Illumination On/Off Control                                                                                                                                                                                                                                                | Auto/Manual                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                              |                                                                                                                                                                                   |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IR wavelength                | 850 nm                                                                                                                                                                            |
| <b>Intelligent Analytics</b> |                                                                                                                                                                                   |
| Multi-Object Detection       | Supports face, human, vehicle detection and capture                                                                                                                               |
| Intelligent Analysis         | Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, and Smart motion detection<br>Support alarm triggering by specified target types (human and vehicle) |
| People Counting              | Support                                                                                                                                                                           |
| <b>Video and Audio</b>       |                                                                                                                                                                                   |
| Streaming Capability         | 3 Streams                                                                                                                                                                         |
| Stream/Frame Rate            | Stream1: 1920×1080, 1280×720 @25/30fps<br>Stream2: D1, VGA, 640×360,CIF, QVGA @25/30fps<br>Stream3: VGA, CIF, QVGA @25/30fps                                                      |
| Bit Rate Control             | CBR/VBR                                                                                                                                                                           |
| Bit Rate                     | Stream1: 200 Kbps to 12 Mbps<br>Stream2: 100 Kbps to 6 Mbps<br>Stream3: 100 Kbps to 3 Mbps                                                                                        |
| Smart Encoder                | Support                                                                                                                                                                           |
| 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)                                                                                                                                               |
| <b>Image</b>                 |                                                                                                                                                                                   |
| Image Adjustment             | Brightness, Sharpness, Contrast, Saturation adjustable                                                                                                                            |
| Scene Setting                | 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            | WDR, HLC, BLC, Defog                                                                                                                                                              |
| 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, SMTP upload, FTP upload, Alarm output, Audible alarm output                                                                                                         |
| <b>Network</b>               |                                                                                                                                                                                   |
| Protocols                    | IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTPC/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                                                                                                                  |
| Max Concurrent Streams | 10 channels                                                                                                                                        |
| User/Host Level        | 32+ users, 3 levels: Administrator, Operator, Media user                                                                                           |
| Security               | IP address filter, HTTPS, Illegal login lock, IEEE 802.1x                                                                                          |
| Web Viewer             | <IE11, Chrome, Firefox, Microsoft Edge                                                                                                             |
| <b>Interface</b>       |                                                                                                                                                    |
| 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, up to 256GB                                                                                                                              |
| Reset Button           | Support                                                                                                                                            |
| <b>General</b>         |                                                                                                                                                    |
| Language               | English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English |
| Power Supply           | 12 VDC (-15% 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 90% RH                                                                                                                                   |
| Ingress Protection     | IP67, IK10                                                                                                                                         |
| Certifications         | CE-EMC<br>- EN 55032, EN IEC 61000-6-3, 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             | φ110.3 × 365.33 mm (φ4.33 × 14.38 inch)                                                                                                            |
| Net Weight             | 1.45 kg (3.2 lb)                                                                                                                                   |

Dimensions (mm)



Accessories

Optional:



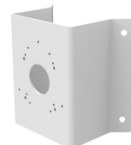
SN-CBK645G  
Junction Box



SN-CBK627D  
Pole Mount



SN-CBK101  
Pole Mount



SN-CBK102  
Corner Mount