



Cyber  
Security



Artificial  
intelligence



Starvis  
1/1.8" sensor



Ultra Low Light

## ULTRA-T8F28

### 8MP Starlight IR Fixed Turret Network Camera



#### KEY FEATURE

- 1/1.8" STARVIS CMOS
- Max. 8MP(3840×2160) @25/30fps resolution
- 2.8mm fixed lens (4mm optional)
- True WDR, 3D DNR, ROI, HLC, Defog
- Support face, human, vehicle detection and capture
- Intelligent analysis: intrusion, single/double line crossing, loitering, wrong way, illegal parking, smart motion detection, people counting
- 1/1 audio input/ output, 1/1 alarm input/ output
- Built-in microphone
- Smart IR distance up to 40m
- Built-in micro SD card slot (up to 1 TB)
- IP66 protection

#### ACCESSORIES



JB-811  
Junction Box



PC-203  
Pendant Cap



PM-841  
Pendant Mount



WM-831  
Wall Mount



WM-832  
Wall Mount

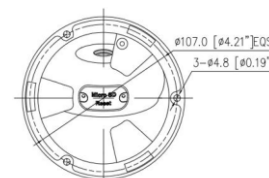
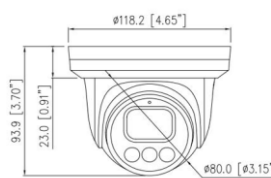


PM-852  
Pole Mount

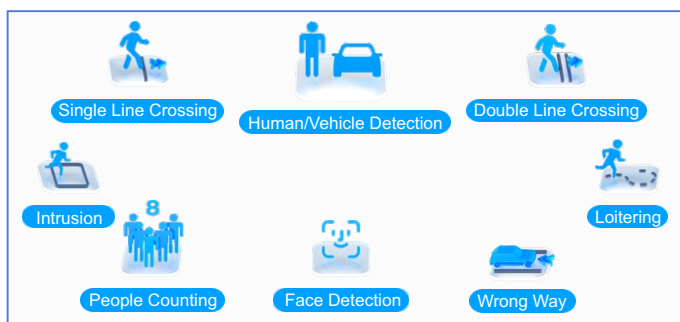


CM-861  
Corner Mount

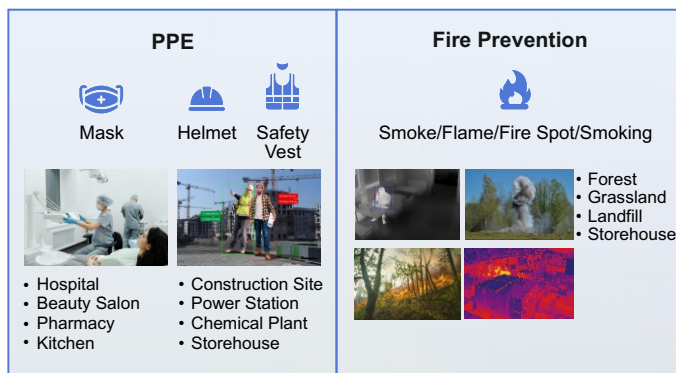
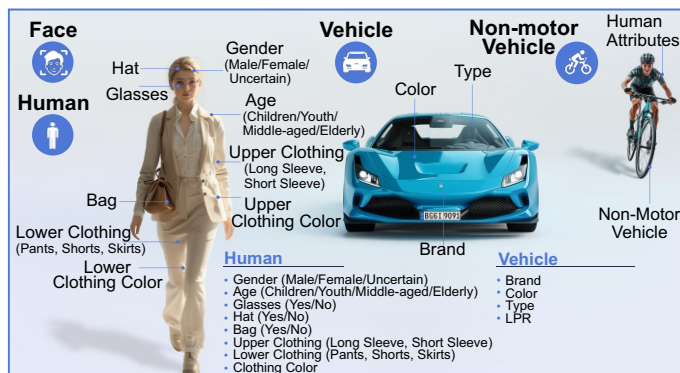
#### DIMENSIONS (MM)



#### FREE STANDARD EMBEDDED ANALYTIC



#### OPTIONAL EXTENSIBLE ANALYTICS





| SPECIFICATION                                                                                                                                                                                                                                                             |                                                                                                                                                                         |                 |                |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|
| CAMERA                                                                                                                                                                                                                                                                    |                                                                                                                                                                         |                 |                |              |
| Image Sensor                                                                                                                                                                                                                                                              | 1/1.8" Progressive Scan CMOS                                                                                                                                            |                 |                |              |
| Max. Resolution                                                                                                                                                                                                                                                           | 8MP (3840×2160)                                                                                                                                                         |                 |                |              |
| Electronic Shutter                                                                                                                                                                                                                                                        | Auto/Manual, 1/5 ~ 1/20,000s                                                                                                                                            |                 |                |              |
| Min. illumination                                                                                                                                                                                                                                                         | Color: 0.005 Lux @ (F1.6, AGC ON),<br>B/W: 0 Lux with IR                                                                                                                |                 |                |              |
| Day & Night                                                                                                                                                                                                                                                               | Auto (ICR)                                                                                                                                                              |                 |                |              |
| Wide Dynamic Range                                                                                                                                                                                                                                                        | True WDR                                                                                                                                                                |                 |                |              |
| Angle Adjustment                                                                                                                                                                                                                                                          | Pan: 0°~355°, Tilt: 0°~80°, Rotation 0°~360°                                                                                                                            |                 |                |              |
| LENS                                                                                                                                                                                                                                                                      |                                                                                                                                                                         |                 |                |              |
| Lens Type                                                                                                                                                                                                                                                                 | Fixed lens, Fixed focal                                                                                                                                                 |                 |                |              |
| Iris                                                                                                                                                                                                                                                                      | Fixed Iris                                                                                                                                                              |                 |                |              |
| Focal Length                                                                                                                                                                                                                                                              | 2.8 mm, 4 mm optional                                                                                                                                                   |                 |                |              |
| Max. Aperture                                                                                                                                                                                                                                                             | F1.6                                                                                                                                                                    |                 |                |              |
| Field of View (FOV)                                                                                                                                                                                                                                                       | 2.8 mm: H: 110.5°, V: 56.5°<br>4 mm: H: 88.4°, V: 50°                                                                                                                   |                 |                |              |
| DORI Distance                                                                                                                                                                                                                                                             |                                                                                                                                                                         |                 |                |              |
| Lens                                                                                                                                                                                                                                                                      | Detect                                                                                                                                                                  | Observe         | Recognize      | Identify     |
| 2.8 mm                                                                                                                                                                                                                                                                    | 89.7m (294.3ft)                                                                                                                                                         | 35.9m (117.8ft) | 17.9m (58.7ft) | 9m (29.5ft)  |
| 4 mm                                                                                                                                                                                                                                                                      | 100m (328.1ft)                                                                                                                                                          | 40m (131.2ft)   | 20m (65.6ft)   | 10m (32.8ft) |
| 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                                                                                                                                                                                                                                                     | IR distance up to 40 m (131.2 ft)                                                                                                                                       |                 |                |              |
| Illum. On/Off Control                                                                                                                                                                                                                                                     | Auto/Manual                                                                                                                                                             |                 |                |              |
| VIDEO                                                                                                                                                                                                                                                                     |                                                                                                                                                                         |                 |                |              |
| Streaming Capability                                                                                                                                                                                                                                                      | 3 Streams                                                                                                                                                               |                 |                |              |
| Stream/Frame Rate                                                                                                                                                                                                                                                         | Stream1: 3840×2160, 2592×1944, 2560×1520, 2560×1440, 2304×1296, 1920×1080,1280×720 @ 25/30fps<br>Stream2: D1, VGA, CIF @ 25/30fps<br>Stream3: VGA, CIF, QVGA @ 25/30fps |                 |                |              |
| Bit Rate Control                                                                                                                                                                                                                                                          | CBR/VBR                                                                                                                                                                 |                 |                |              |
| Bit Rate                                                                                                                                                                                                                                                                  | Stream1: 200kbps~16Mbps<br>Stream2: 100kbps~6Mbps<br>Stream3: 100kbps~3Mbps                                                                                             |                 |                |              |
| Smart Encoder                                                                                                                                                                                                                                                             | Support                                                                                                                                                                 |                 |                |              |
| Region of Interest                                                                                                                                                                                                                                                        | Off/On (8 Zone, Rectangle)                                                                                                                                              |                 |                |              |
| IMAGE                                                                                                                                                                                                                                                                     |                                                                                                                                                                         |                 |                |              |
| Image Adjustment                                                                                                                                                                                                                                                          | Brightness, Sharpness, Contrast, Saturation adjustable                                                                                                                  |                 |                |              |
| Aisle Mode                                                                                                                                                                                                                                                                | Support                                                                                                                                                                 |                 |                |              |
| Mirror                                                                                                                                                                                                                                                                    | Support                                                                                                                                                                 |                 |                |              |
| White Balance                                                                                                                                                                                                                                                             | Auto/Manual                                                                                                                                                             |                 |                |              |
| Day/Night Setting                                                                                                                                                                                                                                                         | Auto, Day, Night, Time                                                                                                                                                  |                 |                |              |
| Noise Reduction                                                                                                                                                                                                                                                           | 2D/3D DNR                                                                                                                                                               |                 |                |              |
| Image Enhancement                                                                                                                                                                                                                                                         | HLC, BLC, Defog, WDR                                                                                                                                                    |                 |                |              |
| Privacy Masking                                                                                                                                                                                                                                                           | 4 areas                                                                                                                                                                 |                 |                |              |

| INTELLIGENT ANALYTICS  |                                                                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multi-Object Detection | Supports face, human, vehicle detection and capture                                                                                                                                                 |
| Intelligent Analysis   | Intrusion, Single/Double line crossing, Loitering, Wrong way and Smart motion detection, Illegal parking, People counting<br>Support alarm triggering by specified target types (human and vehicle) |
| <b>AUDIO</b>           |                                                                                                                                                                                                     |
| Compression            | G.711 A-law, G.711 μ-law, RAM PCM                                                                                                                                                                   |
| Bit Rate               | 64 Kbps (G.711), 128 Kbps (RAW_PCM)                                                                                                                                                                 |
| <b>EVENT</b>           |                                                                                                                                                                                                     |
| Alarm Triggers         | IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Abnormal sound detection                                                                                                             |
| Alarm Events           | Alarm record, Alarm output, FTP upload, SMTP upload, 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                                                   |
| Interoperability       | ONVIF (Profile S/T/G/M), SDK, CGI                                                                                                                                                                   |
| User/Host Level        | Up to 10 users, 3 levels: Administrator, Operator, Media user                                                                                                                                       |
| Security               | IP address filter, encrypted 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                                                                                                                                                          |
| Built-in Microphone    | Support                                                                                                                                                                                             |
| Built-in Speaker       | No                                                                                                                                                                                                  |
| Audio Interface        | 1ch Input, 1ch Output                                                                                                                                                                               |
| Alarm Interface        | 1ch Input, 1ch Output                                                                                                                                                                               |
| Reset Button           | Support                                                                                                                                                                                             |
| SD Card slot           | Built-in, up to 1TB                                                                                                                                                                                 |
| <b>GENERAL</b>         |                                                                                                                                                                                                     |
| Language               | English, Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian. Default: English                                                                                         |
| Power Supply           | DC12V (-10%~+25%)/POE (802.3af)                                                                                                                                                                     |
| Power Consumption      | Without IR: max. 3.25 W (12 VDC),<br>With IR: max. 7.1 W (12 VDC)                                                                                                                                   |
| Operating Temperature  | -40°C ~ 60°C (-40°F ~ 140°F )                                                                                                                                                                       |
| Operating Humidity     | Less than 90% RH                                                                                                                                                                                    |
| Ingress Protection     | IP66                                                                                                                                                                                                |
| Certifications         | CE-EMC (EN 55032:2015+A1:2020, EN 55035:2017+A11:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-6-4:2019, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A2:2021)                                    |
| Material               | Aluminum alloy + plastic                                                                                                                                                                            |
| Dimensions             | φ118.2 × 93.9 mm (4.65 × 3.7 inch)                                                                                                                                                                  |
| Net Weight             | 0.55 kg (1.21 lb)                                                                                                                                                                                   |