

## DS-2DB4223I-CX

### EXIR 23 × Bullet Explosion-proof Network Camera



#### ATEx:

Ex II 2 G Ex db IIC T6 Gb  
Ex II 2 D Ex tb IIIC T80°C Db

#### IECEx:

Ex db IIC T6 Gb  
Ex tb IIIC T80°C Db

- 1/1.8" progressive scan CMOS
- Up to 1920 × 1080 @ 30 fps resolution
- Min. illumination: Color: 0.0005 Lux @(F1.5, AGC ON), B/W: 0.0001 Lux @(F1.5, AGC ON), 0 Lux with IR
- 23 × optical zoom, 12 × digital zoom
- 120 dB WDR, HLC, BLC, 3D DNR, Defog, EIS, Regional Exposure, Regional Focus
- Up to 200 m IR distance
- Support H.265+/H.265 video compression

## ▪ DORI

The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

| DORI            | Detect              | Observe            | Recognize          | Identify          |
|-----------------|---------------------|--------------------|--------------------|-------------------|
| Definition      | 25 px/m             | 63 px/m            | 125 px/m           | 250 px/m          |
| Distance (Tele) | 1862 m (6107.36 ft) | 739 m (2433.92 ft) | 372 m (1220.16 ft) | 186 m (610.08 ft) |

## ▪ Specification

| Camera                 |                                                                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor           | 1/1.8" progressive scan CMOS                                                                                                                                                 |
| Max. Resolution        | 1920 × 1080                                                                                                                                                                  |
| Min. Illumination      | Color: 0.0005 Lux @ (F1.5, AGC ON) B/W: 0.0001 Lux @ (F1.5, AGC ON), 0 Lux with IR                                                                                           |
| Shutter Speed          | 1/1s to 1/30000 s                                                                                                                                                            |
| Day & Night            | ICR                                                                                                                                                                          |
| Zoom                   | 23 × optical, 12 × digital                                                                                                                                                   |
| Slow Shutter           | yes                                                                                                                                                                          |
| Lens                   |                                                                                                                                                                              |
| Focal Length           | 5.9 to 135.7 mm, 23 × optical                                                                                                                                                |
| FOV                    | Horizontal field of view: 58.5° to 3° (wide-tele)<br>Vertical field of view: 34° to 1.7° (wide-tele)<br>Diagonal field of view: 65.8° to 3.5° (wide-tele)                    |
| Focus                  | Auto/Semi-automatic/Manual                                                                                                                                                   |
| Aperture               | F1.5                                                                                                                                                                         |
| Zoom Speed             | approx. 4.6 s                                                                                                                                                                |
| Illuminator            |                                                                                                                                                                              |
| Supplement Light Type  | IR                                                                                                                                                                           |
| Supplement Light Range | 200 m                                                                                                                                                                        |
| Smart Supplement Light | yes                                                                                                                                                                          |
| IR Wavelength          | 850 nm                                                                                                                                                                       |
| PTZ                    |                                                                                                                                                                              |
| Park Action            | yes                                                                                                                                                                          |
| Scheduled Task         | Preset                                                                                                                                                                       |
| Power-off Memory       | yes                                                                                                                                                                          |
| Video                  |                                                                                                                                                                              |
| Main Stream            | 50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720)<br>60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720)                                                                   |
| Sub-Stream             | 50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)<br>60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) |
| Third Stream           | 50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288)<br>60 Hz: 30 fps (704 × 480, 640 × 480, 352 × 240)                                                                           |
| Video Compression      | Main Stream: H.265+/H.265/H.264+/H.264<br>Sub-stream: H.265/H.264/MJPEG<br>Third Stream: H.265/H.264/MJPEG                                                                   |

|                             |                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video Bit Rate              | 32 Kbps to 16384 Kbps                                                                                                                                                                                                                                                                                                 |
| H.264 Type                  | Baseline Profile/Main Profile/High Profile                                                                                                                                                                                                                                                                            |
| H.265 Type                  | Main Profile                                                                                                                                                                                                                                                                                                          |
| Scalable Video Coding (SVC) | Support                                                                                                                                                                                                                                                                                                               |
| Region of Interest (ROI)    | 8 fixed regions for each stream                                                                                                                                                                                                                                                                                       |
| <b>Audio</b>                |                                                                                                                                                                                                                                                                                                                       |
| Audio Compression           | G.711alaw, G.711ulaw, G.722.1, G.726, MP2L2, PCM                                                                                                                                                                                                                                                                      |
| Audio Bit Rate              | 64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32-192 Kbps (MP2L2)                                                                                                                                                                                                                                                 |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/48 kHz                                                                                                                                                                                                                                                                                            |
| Environment Noise Filtering | yes                                                                                                                                                                                                                                                                                                                   |
| <b>Network</b>              |                                                                                                                                                                                                                                                                                                                       |
| Protocols                   | IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour                                                                                                                                                                            |
| Simultaneous Live View      | Up to 20 channels                                                                                                                                                                                                                                                                                                     |
| API                         | Open Network Video Interface (Version 19.12, Profile S, Profile G, Profile T), ISAPI, SDK, ISUP                                                                                                                                                                                                                       |
| Smooth Streaming            | yes                                                                                                                                                                                                                                                                                                                   |
| User/Host                   | Up to 32 users, 3 user levels: administrator, operator, and user                                                                                                                                                                                                                                                      |
| Security                    | Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.2, TLS 1.3, host authentication (MAC address) |
| Network Storage             | NAS (NFS, SMB/CIFS), auto network replenishment (ANR)                                                                                                                                                                                                                                                                 |
| Client                      | iVMS-4200, HikCentral Pro, Hik-Connect                                                                                                                                                                                                                                                                                |
| Web Browser                 | IE11, Chrome 57+, Firefox 52+, Safari 11+                                                                                                                                                                                                                                                                             |
| <b>Image</b>                |                                                                                                                                                                                                                                                                                                                       |
| Image Parameters Switch     | Yes                                                                                                                                                                                                                                                                                                                   |
| Image Settings              | Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by client software or web browser                                                                                                                                                                                                     |
| Day/Night Switch            | auto                                                                                                                                                                                                                                                                                                                  |
| Wide Dynamic Range (WDR)    | 120 dB WDR                                                                                                                                                                                                                                                                                                            |
| SNR                         | ≥52dB                                                                                                                                                                                                                                                                                                                 |
| Defog                       | Optical defog                                                                                                                                                                                                                                                                                                         |
| Image Enhancement           | HLC/BLC/3D DNR/Defog/EIS/Regional Exposure/Regional Focus                                                                                                                                                                                                                                                             |
| Privacy Mask                | 24 programmable polygon privacy masks, mask color or mosaic configurable                                                                                                                                                                                                                                              |
| <b>Interface</b>            |                                                                                                                                                                                                                                                                                                                       |
| Ethernet Interface          | 1 RJ45 10 M/100 M Ethernet                                                                                                                                                                                                                                                                                            |
| On-board Storage            | support microSD/microSDHC/microSDXC cards, up to 256 GB                                                                                                                                                                                                                                                               |
| Audio                       | 1 audio input, 2.0 to 2.4Vp-p, 1k Ohm±10%<br>1 audio output, line level, impedance: 600 Ω                                                                                                                                                                                                                             |
| Alarm                       | 1-ch alarm input and 1-ch alarm output                                                                                                                                                                                                                                                                                |
| RS-485                      | 1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)                                                                                                                                                                                                                                                    |
| <b>Event</b>                |                                                                                                                                                                                                                                                                                                                       |
| Basic Event                 | Motion detection, video tampering alarm, exception, alarm input and output                                                                                                                                                                                                                                            |

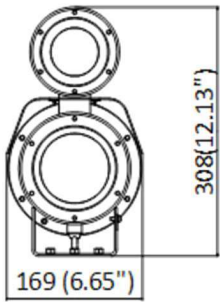
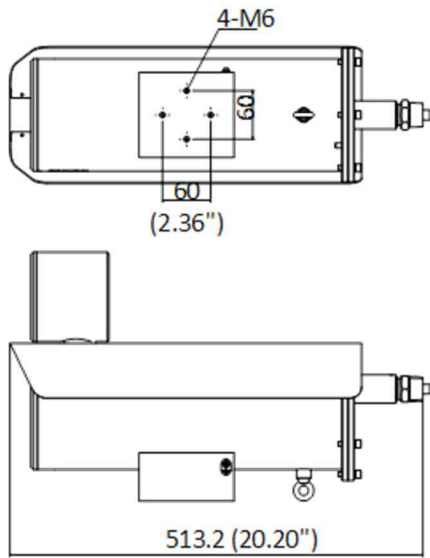
|                               |                                                                                                                                                                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Smart Event                   | Line crossing detection, intrusion detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection, audio exception detection                                                     |
| Alarm Linkage                 | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording                                                                                                                           |
| <b>Deep Learning Function</b> |                                                                                                                                                                                                                                          |
| Face Capture                  | 1. Detects up to 10 faces simultaneously<br>2. Uploads face with background and closed-up face pictures<br>3. Support detecting, tracking, capturing, grading, selecting of face in motion, and output the best face picture of the face |
| <b>General</b>                |                                                                                                                                                                                                                                          |
| Power                         | 100 VAC to 240 VAC & PoE+ (IEEE802.3at class4)<br>Max. 25 W                                                                                                                                                                              |
| Dimension                     | 513.2 × 169 × 308 mm (20.2" × 6.65" × 12.13")                                                                                                                                                                                            |
| Weight                        | Approx. 16.5 kg (36.38 lb.)                                                                                                                                                                                                              |
| Material                      | SUS316L with anti-corrosion surface spray treatment                                                                                                                                                                                      |
| Operating Condition           | -40°C to 60°C (-40°F to 140°F), Working Humidity ≤ 90%                                                                                                                                                                                   |
| General Function              | Anti-flicker, heartbeat, mirror, flash log, password reset via e-mail, pixel counter, password protection, one-key reset, three streams                                                                                                  |
| <b>Approval</b>               |                                                                                                                                                                                                                                          |
| EMC                           | FCC (47 CFR Part 15, Subpart B);<br>CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3:2013+A1:2019, EN 50130-4: 2011 +A1: 2014);<br>RCM (AS/NZS CISPR 32: 2015);<br>IC (ICES-003: Issue 7);<br>KC (KN 32: 2015, KN 35: 2015)       |
| Safety                        | UL (UL 62368-1);<br>CB (IEC 62368-1:2014+A11);<br>CE-LVD (EN 62368-1:2014/A11:2017);<br>BIS (IS 13252(Part 1):2010/ IEC 60950-1 : 2005)                                                                                                  |
| Environment                   | CE-RoHS (2011/65/EU);<br>WEEE (2012/19/EU);<br>Reach (Regulation (EC) No 1907/2006)                                                                                                                                                      |
| Protection                    | IP68, 6000V Lightning Protection, Surge Protection and Voltage Transient Protection                                                                                                                                                      |
| Explosion-Proof Protection    | Ex-mark: ATEX: Ex II 2GD Ex db IIC T6 Gb /Ex tb IIIC T80°C Db;<br>IECEx: Ex db IIC T6 Gb /Ex tb IIIC T80°C Db                                                                                                                            |

## ▪ Available Model

DS-2DB4223I-CX

*\*You are recommended to purchase memory card together with the product if needed. After ordering, the memory card will be installed to product during manufacturing.*

## ▪ Dimension



Unit: mm (inch)

- Accessory
- Optional

| DS-1707ZJ-Y-AC(OS)    DS-1677ZJ-XS-1.0(D)    DS-2780ZJ-X/316L(OS)                   |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |