

## DS-2DE7A225IW-AEB(T5) 2 MP 25 × IR Network Speed Dome

# **Acu**Sense



Hikvision DS-2DE7A225IW-AEB(T5) 2 MP 25 × IR Network Speed Dome adopts 1/2.8" progressive scan CMOS chip. With the 25 × optical zoom lens, the camera offers more details over expansive areas.

This series of cameras can be widely used for wide ranges of high-definition, such as the rivers, roads, railways, airports, squares, parks, scenic spots, and venues, etc.

Empowered by deep learning algorithms, Hikvision AcuSense technology brings human and vehicle targets classification alarms to front- and back-end devices. The system focuses on human and vehicle targets, vastly improving alarm efficiency and effectiveness.



- 1/2.8" progressive scan CMOS
- High quality imaging with 2 MP resolution, up to 60 fps
- Excellent low-light performance with powered-by-DarkFighter technology
- Audio visual alarm: The white flashing light and audible warning can be triggered by certain events
- 25 × optical zoom and 16 × digital zoom provide close up views over expansive areas
- Expansive night view with up to 200 m IR distance
- Focuses on human and vehicle targets classification based on deep learning
- Face capture: Up to 5 faces captured at the same time



#### 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) | 1600.0 m (5249.3 ft) | 634.9 m (2083.1 ft) | 320.0 m (1049.9 ft) | 160.0 m (524.9 ft) |

#### Specification

| Camera                    |  |  |  |  |
|---------------------------|--|--|--|--|
| Image Sensor              | 1/2.8" progressive scan CMOS   |  |  |  |
| Max. Resolution           | 1920 × 1080  |  |  |  |
| Min. Illumination         | Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0.001 Lux@(F1.6, AGC ON), 0 Lux with IR                    |  |  |  |
| Shutter Speed             | 1/1 s to 1/30000 s   |  |  |  |
| Slow Shutter              | Yes  |  |  |  |
| Day & Night               | IR cut filter  |  |  |  |
| Zoom                      | 25 × optical, 16 × digital   |  |  |  |
| Lens                      |  |  |  |  |
| Focal Length              | 4.8 mm to 120 mm   |  |  |  |
| Zoom Speed                | Approx. 3.6 s  |  |  |  |
|                           | Horizontal field of view: 57.6° to 2.5° (wide-tele),   |  |  |  |
| FOV                       | Vertical field of view: 34.4° to 1.4° (wide-tele),   |  |  |  |
|                           | Diagonal field of view: 64.5° to 2.9° (wide-tele)  |  |  |  |
| Aperture                  | Max. F1.6  |  |  |  |
| Focus                     | Auto, semi-auto, manual  |  |  |  |
| Illuminator               |  |  |  |  |
| Supplement Light Range    | IR Distance: up to 200 m   |  |  |  |
| Supplement Light Type     | IR   |  |  |  |
| PTZ                       |  |  |  |  |
| Movement Range (Pan) 360° |  |  |  |  |
| Movement Range (Tilt)     | -15° to 90° (auto flip)  |  |  |  |
| Pan Speed                 | Pan speed: configurable from 0.1° to 160°/s; preset speed: 240°/s                                  |  |  |  |
| Tilt Speed                | Tilt speed: configurable from 0.1° to 120°/s, preset speed 200°/s                                  |  |  |  |
| Proportional Pan          | Yes  |  |  |  |
| Presets                   | 300  |  |  |  |
| Patrol Scan               | 8 patrols, up to 32 presets for each patrol  |  |  |  |
| Pattern Scan              | 4 pattern scans  |  |  |  |
| Power-off Memory          | Yes  |  |  |  |
| Park Action               | Preset, patrol scan, pattern scan, auto scan, tilt scan, random scan, frame scan,<br>panorama scan |  |  |  |
| 3D Positioning            | Yes  |  |  |  |
| PTZ Status Display        | itus Display Yes   |  |  |  |
| Preset Freezing           | Yes  |  |  |  |



| Scheduled Task  | Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan,          |  |
|---|--|--|
| Scheduled rask  | panorama scan, dome reboot, dome adjust, aux output  |  |
| Video   |  |  |
|   | 50 Hz: 50 fps (1920 × 1080, 1280 × 960, 1280 × 720)  |  |
| Main Stream   | 60 Hz: 60 fps (1920 × 1080, 1280 × 960, 1280 × 720)  |  |
|   | *High frame rate is supported under certain settings.                                      |  |
| Sub-Stream  | 50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288);   |  |
| Sub Stream  | 60 Hz: 30 fps (704 × 480, 640 × 480, 352 × 240)  |  |
| Third Stream  | 50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288);      |  |
|   | 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240)       |  |
|   | Main stream: H.265+/H.265/H.264+/H.264   |  |
| Video Compression   | Sub-stream: H.265/H.264/MJPEG  |  |
|   | Third stream: H.265/H.264/MJPEG  |  |
| Video Bit Rate  | 32 kbps to 16384 kbps  |  |
| Н.264 Туре  | Baseline Profile/Main Profile/High Profile   |  |
| Н.265 Туре  | Main Profile   |  |
| Scalable Video Coding (SVC)   | H.264 and H.265 encoding   |  |
| Region of Interest (ROI)  | 8 fixed regions for each stream  |  |
| Audio   |  |  |
| 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                                       |  |  |
| Network   |  |  |
| Network Storage NAS (NFS, SMB/CIFS), auto network replenishment (ANR) |  |  |
| Protocols   | IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP,          |  |
| PTOLOCOIS   | RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour, Websocket, Websockets            |  |
| API   | Open Network Video Interface (Version 19.12, Profile S, Profile G, Profile T), ISAPI, SDK, |  |
| AFI   | ISUP   |  |
| Simultaneous Live View  | Up to 20 channels  |  |
| User/Host   | Up to 32 users, 3 user levels: administrator, operator, and user                           |  |
|   | Password protection, complicated password, HTTPS encryption, 802.1X authentication         |  |
| Security  | (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest               |  |
| Security  | authentication for HTTP/HTTPS, RTP/RTSP over HTTPS, control timeout settings,              |  |
|   | security audit log, TLS 1.2, TLS 1.3, host authentication (MAC address)                    |  |
| Client  | iVMS-4200, HikCentral Pro, Hik-Connect   |  |
| Web Browser   | IE11, Chrome 57+, Firefox 52+, Safari 11+  |  |
| Image   |  |  |
| Day/Night Switch  | Day, Night, Auto, Schedule   |  |
| Image Enhancement   | hage Enhancement BLC, HLC, 3D DNR  |  |
| Vide Dynamic Range (WDR) 120 dB                                       |  |  |
| Defog   | Digital defog  |  |
| Regional Exposure   | ional Exposure Yes   |  |
| Regional Focus Yes  |  |  |



|                        | Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by             |  |  |  |
|------------------------|--|--|--|--|
| Image Settings         | client software or web browser   |  |  |  |
| Privacy Mask           | 24 programmable polygon privacy masks, mask color or mosaic configurable                       |  |  |  |
| SNR                    | > 52 dB  |  |  |  |
| Interface              |  |  |  |  |
| Ethernet Interface     | 1 RJ45 10M/100M self-adaptive Ethernet port  |  |  |  |
| On-board Storage       | Built-in memory card slot, support microSD/SDHC/SDXC card, up to 256 GB                        |  |  |  |
| Alarm                  | 2 inputs, 1 output   |  |  |  |
| Audio                  | 1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: 1 k $\Omega$ $\pm$ 10%; 1 |  |  |  |
| Audio                  | output (line out), line level, output impedance: 600 $\Omega$                                  |  |  |  |
| Reset                  | Yes  |  |  |  |
| Built-in Speaker       | 1 built-in speaker with effective distance reaching max. 30 meters                             |  |  |  |
| Event                  |  |  |  |  |
| Basic Event            | Motion detection, video tampering alarm, exception, alarm input and output                     |  |  |  |
|                        | Line crossing detection, intrusion detection, region entrance detection, region exiting        |  |  |  |
| Smart Event            | detection, unattended baggage detection, object removal detection, audio exception             |  |  |  |
|                        | detection  |  |  |  |
| Smart Tracking         | Manual tracking, auto-tracking   |  |  |  |
|                        | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm           |  |  |  |
| Alarm Linkage          | output, trigger recording, audible warning, white light flashing, and PTZ actions (such        |  |  |  |
| -                      | as preset, patrol scan, pattern scan)  |  |  |  |
| Deep Learning Function |  |  |  |  |
|                        | Detects up to 5 faces simultaneously.  |  |  |  |
| Face Capture           | Supports detecting, capturing, grading, selecting of face in motion, and output the best       |  |  |  |
|                        | face picture of the face   |  |  |  |
|                        | Line crossing, intrusion, region entrance, region exiting                                      |  |  |  |
| Perimeter Protection   | Support alarm triggering by specified target types (human and vehicle)                         |  |  |  |
| General                |  |  |  |  |
| _                      | 24 VAC, max. 42 W (including max. 18 W for IR and max. 10 W for heater);                       |  |  |  |
| Power                  | Hi-PoE   |  |  |  |
| Operating Condition    | -30 °C to 65 °C (-22 °F to 149 °F). Humidity 90% or less (non-condensing)                      |  |  |  |
| Demist                 | Yes  |  |  |  |
| Material               | ADC12  |  |  |  |
| Dimension              | Ø 220 mm × 363.3 mm (Ø 8.66" × 14.3")  |  |  |  |
| Weight                 | Approx. 5 kg (11.03 lb.)   |  |  |  |
| Approval               |  |  |  |  |
|                        | IP66 (IEC 60529-2013), IK10 (excluding glass window), TVS 6000V lightning protection,          |  |  |  |
| Protection             | surge protection and voltage transient protection  |  |  |  |
|                        | FCC SDoC (47 CFR Part 15, Subpart B);  |  |  |  |
|                        | CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013, EN 50130-4: 2011               |  |  |  |
|                        | +A1: 2014);  |  |  |  |
| EMC                    | RCM (AS/NZS CISPR 32: 2015);   |  |  |  |
|                        | IC VoC (ICES-003: Issue 6, 2019);  |  |  |  |
|                        | KC (KN 32: 2015, KN 35: 2015)  |  |  |  |



| 1 |             | UL (UL 62368-1);   |
|---|-------------|--|
|   |             | CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014); |
|   | Safety      | CE-LVD (EN 62368-1:2014+A11:2017);                               |
| - |             | BIS (IS 13252(Part 1):2010+A1:2013+A2:2015);                     |
|   |             | LOA (SANS IEC60950-1)  |
|   | Environment | CE-RoHS (2011/65/EU); WEEE (2012/19/EU);                         |
|   |             | Reach (Regulation (EC) No 1907/2006)                             |

### Available Model

DS-2DE7A225IW-AEB(T5)

## Typical Application

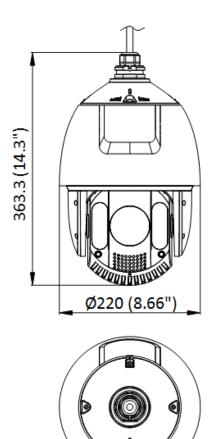
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

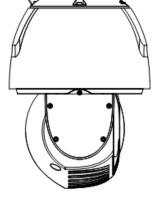
This model has NO SPECIFIC PROTECTION.

| Level                  | Description   |  |  |
|------------------------|---|--|--|
| Top-level protection   | Hikvision products at this level are equipped for use in areas where professional anti-corrosion    |  |  |
|                        | protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and |  |  |
|                        | more.   |  |  |
| Moderate protection    | Hikvision products at this level are equipped for use in areas with moderate anti-corrosion         |  |  |
|                        | demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away   |  |  |
|                        | from coastlines, as well as areas affected by acid rain.  |  |  |
| No specific protection | Hikvision products at this level are equipped for use in areas where no specific anti-corrosion     |  |  |
|                        | protection is needed.   |  |  |



## Dimension





Unit: mm (inch)

- Accessory
- Included





| Optional                 |                        |               |   |             |
|--------------------------|------------------------|---------------|---|-------------|
| DS-1604ZJ-BOX-<br>CORNER | DS-1660ZJ              | DS-1604ZJ-box | DS-1619ZJ                                 | DS-1663ZJ   |
| CORNER                   |                        |               |   |             |
|                          | -                      | Steel.        | $\cap$                                    | <i>©</i>    |
|                          |                        |               | l   | -25         |
| DS-1667ZJ                | DS-1662ZJ              | DS-1673ZJ     | DS-1682ZJ                                 | DS-1681ZJ-2 |
|                          |                        |               |   |             |
|                          | I                      | n n           | R. S. |             |
| DS-1604ZJ                | DS-1604ZJ-BOX-<br>POLE | DS-1681ZJ     | DS-1661ZJ                                 | DS-1100KI   |
|                          |                        |               | 6   |             |
|                          |                        | a b           | I   |             |
| *DS 167271 should be us  |                        |               |   |             |

\*DS-1673ZJ should be used with DS-1661ZJ or DS-1662ZJ.

