

## DS-2DE7A425IWG1-E

4 MP 25X Powered by DarkFighter IR Acusense Network Speed Dome



Hikvision DS-2DE7A425IWG1-E 4 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.

- HIK AI-ISP for excellent noise reduction effect
- High focus speed with self-learning focus technology keep the picture clear every single second
- High quality imaging with 4 MP resolution
- 1/2.8" progressive scan CMOS
- 25× optical zoom and 16× digital zoom provide close up views over expansive areas
- Expansive night view with up to 200 m IR distance
- Built-in arrayed dual-microphone for real-time high quality audio security
- Focuses on human and vehicle targets classification based on deep learning
- Support link to hikvision network speakers and network microphones to play audio
- Improve playback efficiency and be compatible with the AcuSeek and AcuSearch technologies of NVR for combined use
- Audio visual alarm: The white flashing light and audible warning can be triggered by certain events

## ▪ Specification

| Camera                 |                                                                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor           | 1/2.8" Progressive Scan CMOS                                                                                                                                                                   |
| Max. Resolution        | 2560 × 1440                                                                                                                                                                                    |
| 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                                                                                                                                                                             |
| Day & Night            | IR cut filter                                                                                                                                                                                  |
| Zoom                   | 25 × optical, 16 × digital                                                                                                                                                                     |
| Slow Shutter           | Yes                                                                                                                                                                                            |
| Lens                   |                                                                                                                                                                                                |
| Focal Length           | 4.8 to 120 mm                                                                                                                                                                                  |
| FOV                    | Horizontal field of view: 55° to 2.65°, vertical field of view: 33° to 1.5°, diagonal field of view: 61.5° to 3.03°                                                                            |
| Focus                  | Auto, semi-auto, manual                                                                                                                                                                        |
| Aperture               | Max. F1.6                                                                                                                                                                                      |
| Zoom Speed             | Approx. 3.5 s                                                                                                                                                                                  |
| Illuminator            |                                                                                                                                                                                                |
| Supplement Light Type  | IR                                                                                                                                                                                             |
| Supplement Light Range | IR Distance: up to 200 m                                                                                                                                                                       |
| 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                                                                                                                                                                                            |
| Preset Freezing        | Yes                                                                                                                                                                                            |
| Patrol Scan            | 8 patrols, up to 32 presets for each patrol                                                                                                                                                    |
| Pattern Scan           | 4 pattern scans                                                                                                                                                                                |
| Park Action            | Preset, pattern scan, auto scan, tilt scan, random scan, frame scan, panorama scan                                                                                                             |
| 3D Positioning         | Yes                                                                                                                                                                                            |
| PTZ Status Display     | Yes                                                                                                                                                                                            |
| Scheduled Task         | Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output                                                          |
| Power-off Memory       | Yes                                                                                                                                                                                            |
| Video                  |                                                                                                                                                                                                |
| Main Stream            | 50 Hz: 50 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720),<br>60 Hz: 60 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720)<br>*High frame rate is supported under certain settings. |
| Sub-Stream             | 50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288)<br>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)<br>60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 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) | H.264 and H.265 encoding                                                                                                                                                                                                                                                                                              |
| Region of Interest (ROI)    | 8 fixed regions for each stream                                                                                                                                                                                                                                                                                       |
| <b>Audio</b>                |                                                                                                                                                                                                                                                                                                                       |
| Audio Compression           | G.711,G.722.1,G.726,MP2L2,PCM,MP3,AAC-LC                                                                                                                                                                                                                                                                              |
| Audio Bit Rate              | 64 Kbps (G.711),16 Kbps (G.722.1),16 Kbps (G.726),32 to 192 Kbps (MP2L2),16 to 64Kbps (AAC-LC),8 to 320 Kbps (MP3)                                                                                                                                                                                                    |
| Audio Sampling Rate         | MP2L2: 16kHz,AAC-LC: 16kHz,PCM: 8kHz, 16kHz,MP3: 8kHz, 16kHz                                                                                                                                                                                                                                                          |
| 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                         | ONVIF (ProfileS, ProfileG, ProfileT),ISAPI,SDK,ISUP                                                                                                                                                                                                                                                                   |
| 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                 | Chrome 80+, Firefox 80+, Safari 13+, Edge 89+                                                                                                                                                                                                                                                                         |
| <b>Image</b>                |                                                                                                                                                                                                                                                                                                                       |
| Image Settings              | Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by client software or web browser                                                                                                                                                                                                     |
| Day/Night Switch            | Day, Night, Auto, Schedule                                                                                                                                                                                                                                                                                            |
| Wide Dynamic Range (WDR)    | 120 dB                                                                                                                                                                                                                                                                                                                |
| SNR                         | > 52 dB                                                                                                                                                                                                                                                                                                               |
| Defog                       | Digital defog                                                                                                                                                                                                                                                                                                         |
| Image Stabilization         | EIS                                                                                                                                                                                                                                                                                                                   |
| Image Enhancement           | BLC, HLC, 3D DNR                                                                                                                                                                                                                                                                                                      |
| Privacy Mask                | 24 programmable polygon privacy masks, mask color or mosaic configurable                                                                                                                                                                                                                                              |
| Regional Focus              | Yes                                                                                                                                                                                                                                                                                                                   |
| Regional Exposure           | Yes                                                                                                                                                                                                                                                                                                                   |
| VR View                     | 360° Real Scene Stitched Panoramic Image                                                                                                                                                                                                                                                                              |
| <b>Interface</b>            |                                                                                                                                                                                                                                                                                                                       |
| Ethernet Interface          | 1 RJ45 10M/100M self-adaptive Ethernet port                                                                                                                                                                                                                                                                           |
| On-board Storage            | Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 512 GB                                                                                                                                                                                                                                     |
| Built-in Speaker            | 1 built-in speaker with effective distance reaching max. 30 meters                                                                                                                                                                                                                                                    |
| Audio                       | 1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: 1 kΩ ± 10%; 1 output (line out), line level, output impedance: 600 Ω                                                                                                                                                                             |
| Alarm                       | 2 inputs, 1 output                                                                                                                                                                                                                                                                                                    |
| Reset                       | Yes                                                                                                                                                                                                                                                                                                                   |
| Built-in Microphone         | 2 built-in Microphone: Arrayed dual-microphone up to 8 meters                                                                                                                                                                                                                                                         |

| Event                    |                                                                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                                                       |
| Linkage                  | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, audible warning, white light flashing, and PTZ actions (such as preset, patrol scan, pattern scan, tracking)                                            |
| Deep Learning Function   |                                                                                                                                                                                                                                                                         |
| Face Capture             | Detects up to 5 faces simultaneously.<br>Supports detecting, capturing, grading, selecting of face in motion, and output the best face picture of the face                                                                                                              |
| Regional People Counting | Supports up to 8 detection regions, and independent arming schedule and linkage method<br>Supports 3 detection modes: people density detection, number of people exception detection, waiting time exception detection<br>Supports searching real-time number of people |
| Linkage and Tracking     |                                                                                                                                                                                                                                                                         |
| Smart Tracking           | Manual tracking, auto-tracking                                                                                                                                                                                                                                          |
| General                  |                                                                                                                                                                                                                                                                         |
| Power                    | 36 VDC (Max. 48 W, including max. 9 W for IR and max. 2 W for heater),<br>PoE 802.3bt, type3, class6,<br>HI-PoE                                                                                                                                                         |
| Dimension                | Ø 220 mm × 363.3 mm (Ø 8.66" × 13.91")                                                                                                                                                                                                                                  |
| Weight                   | Approx. 5 kg (11.03 lb.)                                                                                                                                                                                                                                                |
| Material                 | ADC12                                                                                                                                                                                                                                                                   |
| Operating Condition      | -30 °C to 65 °C (-22 °F to 149 °F). Humidity 90% or less (non-condensing)                                                                                                                                                                                               |
| Demist                   | Yes                                                                                                                                                                                                                                                                     |
| Approval                 |                                                                                                                                                                                                                                                                         |
| EMC                      | CE-EMC (EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021+A2:2024, EN 61000-3-3:2013+A1:2019+A2:2021), RCM (AS/NZS CISPR 32: 2015)                                                                                                          |
| Safety                   | CB (IEC 62368-1:2014), CE-LVD (EN 62368-1:2014 + A11:2017)                                                                                                                                                                                                              |
| Environment              | CE-RoHS (2011/65/EU); WEEE (2012/19/EU);<br>Reach (Regulation (EC) No 1907/2006)                                                                                                                                                                                        |
| Protection               | IP67 (IEC 60529-2013), IK10 (IEC 62262:2002), TVS 6000 V lightning protection, surge protection and voltage transient protection                                                                                                                                        |

## ▪ 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) | 2402.4 m (7881.9 ft) | 953.3 m (3127.7 ft) | 480.5 m (1576.4 ft) | 240.2 m (788.2 ft) |
| Distance (Wide) | 96.1 m (315.3 ft)    | 38.1 m (125.1 ft)   | 19.2 m (63.1 ft)    | 9.6 m (31.5 ft)    |

## ▪ 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.

DS-2DE7A425IWG1-E 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.                                                                                                                                  |

## ▪ Accessory

### ▪ Included

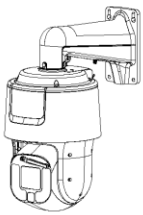
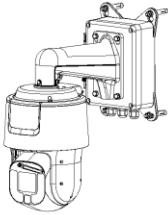
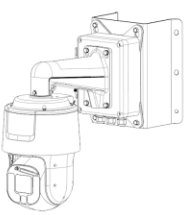
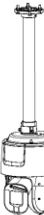
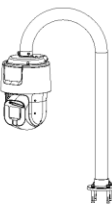
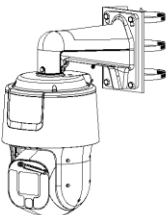
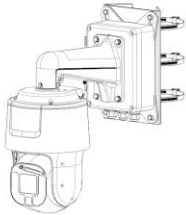


### ▪ Optional

| DS-1604ZJ-box                                                                       | DS-1604ZJ-BOX-CO<br>RNER                                                            | DS-1673ZJ                                                                           | DS-1661ZJ                                                                             | DS-1619ZJ                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| DS-1684ZJ                                                                           | DS-1661ZJ-R/B                                                                       | DS-1604ZJ-pole                                                                      | DS-1604ZJ-BOX-PO<br>LE                                                                | DS-1662ZJ                                                                             |

|                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| <b>DS-1602ZJ-R/B</b>                                                              | <b>DS-1663ZJ</b>                                                                  |                                                                                   |                                                                                     |                                                                                     |
|  |  |                                                                                   |                                                                                     |                                                                                     |

## ■ Installation Methods

| Wall Mounting<br>DS-1602ZJ                                                          | Wall Mounting<br>DS-1604ZJ-box                                                      | Corner Mounting<br>DS-1604ZJ-BOX-CORN<br>ER                                         | Horizontal Pole<br>Mounting<br>DS-1673ZJ+DS-1662ZJ                                    | Pendant Mounting<br>DS-1661ZJ                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| Pendant Mounting<br>DS-1662ZJ                                                       | Pendant Mounting<br>DS-1663ZJ                                                       | Gooseneck Mounting<br>DS-1619ZJ                                                     | Vertical Pole<br>Mounting<br>DS-1684ZJ+DS-1602ZJ                                      | Vertical Pole<br>Mounting<br>DS-1604ZJ-pole                                           |
|  |  |  |   |  |
| Vertical Pole<br>Mounting<br>DS-1604ZJ-BOX-POLE                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|  |                                                                                     |                                                                                     |                                                                                       |                                                                                       |

# See Far, Go Further



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