

**DS-2DE7A812MCG-EB**  
**7-inch 8 MP 12X ColorVu Network Speed Dome****ColorVu**

Hikvision DS-2DE7A812MCG-EB 8 MP 12 × IR Network Speed Dome adopts 1/1.8" progressive scan CMOS chip. With the 12 × 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.

- 24/7 colorful imaging
- High quality imaging with 8 MP resolution
- 12× optical zoom and 64 × digital zoom provide close up views over expansive areas
- Audio visual alarm: The white flashing light and audible warning can be triggered by certain events
- Expansive night view with up to 150 m IR distance and 100 m white light
- Focuses on human and vehicle targets classification based on deep learning
- Face capture: Up to 5 faces captured at the same time

## ▪ Specification

| Camera                 |                                                                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor           | 1/1.8" progressive scan CMOS                                                                                                                                                  |
| Max. Resolution        | 3840 × 2160                                                                                                                                                                   |
| Min. Illumination      | Color: 0.0005Lux @ (F1.2, AGC ON), B/W: 0.0001Lux @ (F1.2, AGC ON), 0 lux with light                                                                                          |
| Shutter Speed          | 1/1 s to 1/30000 s                                                                                                                                                            |
| Day & Night            | IR cut filter                                                                                                                                                                 |
| Zoom                   | 12 × optical, 64 × digital                                                                                                                                                    |
| Slow Shutter           | Yes                                                                                                                                                                           |
| Lens                   |                                                                                                                                                                               |
| Focal Length           | 6.7 mm to 80.4 mm                                                                                                                                                             |
| FOV                    | Horizontal field of view: 53° to 8.1° (wide-tele),<br>Vertical field of view: 31.3° to 4.6° (wide-tele),<br>Diagonal field of view: 59.6° to 9.3° (wide-tele)                 |
| Focus                  | Auto, semi-auto, manual                                                                                                                                                       |
| Aperture               | Max. F1.2                                                                                                                                                                     |
| Zoom Speed             | Approx. 5.8 s                                                                                                                                                                 |
| Illuminator            |                                                                                                                                                                               |
| Supplement Light Type  | Hybrid (IR and White Light)                                                                                                                                                   |
| Supplement Light Range | White light: up to 100 m<br>IR: up to 150 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, patrol 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: 25 fps (3840 × 2160, 2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720);<br>60 Hz: 24 fps (3840 × 2160, 2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720)               |
| Sub-Stream             | 50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288);<br>60 Hz: 24 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: 24 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.711alaw, G.711ulaw, G.722.1, G.726, MP2L2, AAC-LC, PCM                                                                                                                                                                                                                                                              |
| Audio Bit Rate              | 64 Kbps (G.711), 16 Kbps (G.722.1), 16 Kbps (G.726), 32 to 192 Kbps (MP2L2), 16 to 64 Kbps (AAC-LC), 8 to 320 Kbps (MP3)                                                                                                                                                                                              |
| Audio Sampling Rate         | MP2L2: 16kHz, 32kHz, 48kHz, AAC-LC: 16kHz, 32kHz, 48kHz, PCM: 8kHz, 16kHz, 32kHz, 48kHz, MP3: 8kHz, 16kHz, 32kHz, 48kHz                                                                                                                                                                                               |
| 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, WebSocket, WebSockets                                                                                                                                                     |
| Simultaneous Live View      | Up to 20 channels                                                                                                                                                                                                                                                                                                     |
| API                         | ONVIF (Profile S, Profile G, Profile T), 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                 | IE11, 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                                                                                                                                                                                                                                                                                                                   |
| <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 k $\Omega$ $\pm$ 10%; 1 output (line out), line level, output impedance: 600 $\Omega$                                                                                                                                                          |

|                               |                                                                                                                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alarm                         | 2 inputs, 1 output                                                                                                                                                                                                 |
| Reset                         | Yes                                                                                                                                                                                                                |
| <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                               |
| 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) |
| Smart Tracking                | Manual tracking, auto-tracking                                                                                                                                                                                     |
| <b>Deep Learning Function</b> |                                                                                                                                                                                                                    |
| 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                                                         |
| <b>General</b>                |                                                                                                                                                                                                                    |
| Power                         | 24 VAC, max. 42 W (including max. 12 W for IR and max. 2 W for heater)<br>Hi-PoE                                                                                                                                   |
| Dimension                     | Ø 220 mm × 357.3 mm (Ø8.66" × 14.07")                                                                                                                                                                              |
| Weight                        | Approx. 5.5 kg (12.13 lb.)                                                                                                                                                                                         |
| Material                      | ADC12                                                                                                                                                                                                              |
| Operating Condition           | -30 °C to 65 °C (-22 °F to 149 °F). Humidity 90% or less (non-condensing)                                                                                                                                          |
| Demist                        | Yes                                                                                                                                                                                                                |
| <b>Approval</b>               |                                                                                                                                                                                                                    |
| EMC                           | CE-EMC (EN 55032:2015, EN 61000-3-2:2019, EN 61000-3-3:2013 + A1:2019, EN 50130-4:2011 + A1:2014), RCM (AS/NZS CISPR 32:2015), IC (ICES-003: Issue 7), KC (KN 32:2015, KN 35:2015)                                 |
| Safety                        | UL (UL 62368-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 62368-1:2014+A11:2017); BIS (IS 13252 (Part 1):2010+A1:2013+A2:2015); LOA (IEC/EN 60950-1)                                              |
| Environment                   | CE-RoHS (2011/65/EU); WEEE (2012/19/EU); 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

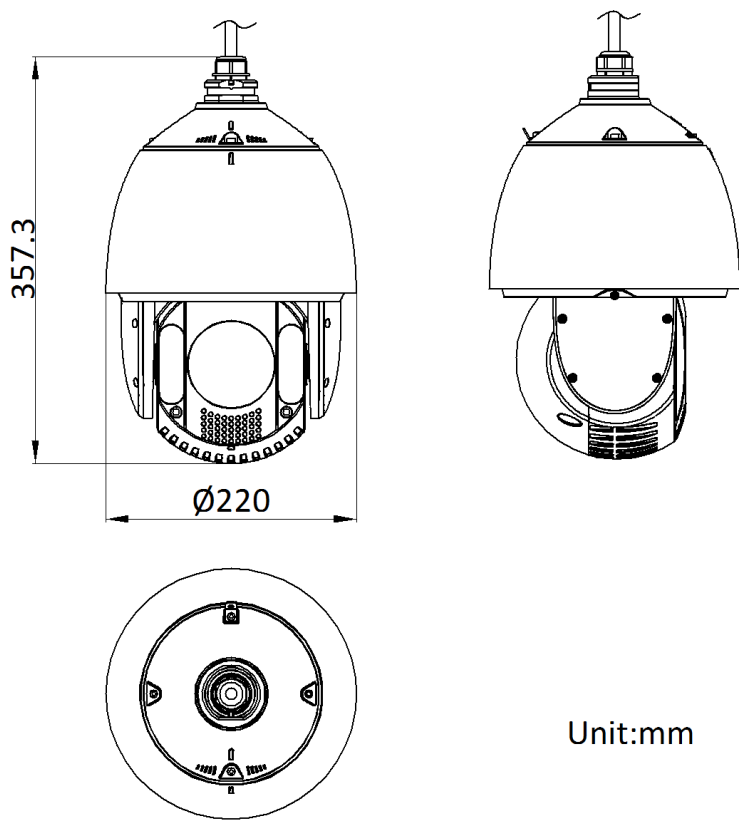
The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4:2015.

| DORI            | Detect               | Observe             | Recognize          | Identify           |
|-----------------|----------------------|---------------------|--------------------|--------------------|
| Definition      | 25 px/m              | 63 px/m             | 125 px/m           | 250 px/m           |
| Distance (Tele) | 1080.0 m (3543.3 ft) | 428.6 m (1406.2 ft) | 216.0 m (708.7 ft) | 108.0 m (354.3 ft) |

## ▪ Available Model

DS-2DE7A812MCG-EB(B)

## ▪ Dimension



- Accessory
- Included

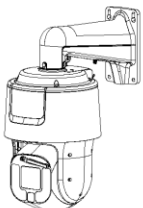
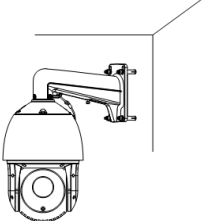
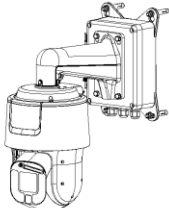
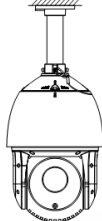
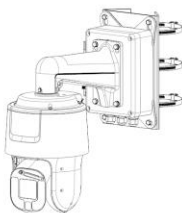
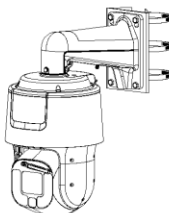
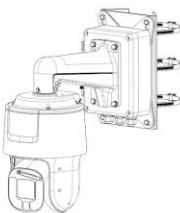
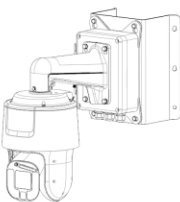
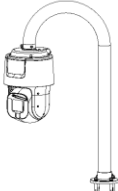


▪ Optional

| DS-1602ZJ-R/B | DS-1663ZJ | DS-1604ZJ-BOX-PO<br>LE | DS-1604ZJ-BOX-CO<br>RNER | DS-1604ZJ-box |
|---------------|-----------|------------------------|--------------------------|---------------|
|               |           |                        |                          |               |

| DS-1684ZJ                                                                         | DS-1661ZJ-R/B                                                                     | DS-1619ZJ                                                                         | DS-1662ZJ                                                                           | DS-1661ZJ                                                                           |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| DS-1604ZJ-pole                                                                    | DS-1673ZJ                                                                         | DS-1673ZJ                                                                         | DS-1673ZJ                                                                           |                                                                                     |
|  |  |  |  |                                                                                     |

## ■ Installation Methods

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

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