

**DS-2XE6686G0-LIZHRSU(316L)**  
**316L 8MP Explosion-Proof Vari-focal Bullet**



- Explosion-proof design: the camera has passed international ATEX & IECEx certifications, and can be used in gas and dust hazardous scenarios
- IP68 water resistant, preventing water ingress for outdoor use
- H.265+/H.265/H.264+/H.264 encoding: efficient compression technology saves storage space and reduces bandwidth requirements

## ▪ Specification

| Camera                  |                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor            | 1/1.8" Progressive Scan CMOS                                                                                                                                                                                                                   |
| Max. Resolution         | 3840 × 2160                                                                                                                                                                                                                                    |
| Min. Illumination       | Color: 0.002 Lux @ (F1.2, AGC ON), 0 Lux with light, B/W: 0.0002 Lux @ (F1.2, AGC ON), B/W: 0 Lux with IR                                                                                                                                      |
| Shutter Time            | 1/3 s to 1/100,000 s                                                                                                                                                                                                                           |
| Day & Night             | IR cut filter                                                                                                                                                                                                                                  |
| Lens                    |                                                                                                                                                                                                                                                |
| Focal Length & FOV      | 2.8 to 12 mm, horizontal FOV 104°~41.2°, vertical FOV 54.2°~23.1°, diagonal FOV 126.5°~47.3°<br>8 to 32 mm, horizontal FOV 41.8°~15°, vertical 22.9°~8.5°, diagonal FOV 48.1°~17.1°                                                            |
| DORI                    |                                                                                                                                                                                                                                                |
| DORI                    | 2.8 to 12 mm:<br>Wide: D: 93.8 m, O: 37.2 m, R: 18.8 m, I: 9.4 m<br>Tele: D: 220.0 m, O: 87.3 m, R: 44.0 m, I: 22.0 m<br>8 to 32 mm:<br>Wide: D: 218 m, O: 86.5 m, R: 43.6 m, I: 21.8 m<br>Tele: D: 580.0 m, O: 230.2 m, R: 116.0 m, I: 58.0 m |
| Illuminator             |                                                                                                                                                                                                                                                |
| Supplement Light Type   | IR, White Light                                                                                                                                                                                                                                |
| Supplement Light Range  | 2.8~12mm: IR: up to 50 m; White Light: up to 30 m<br>8~32mm: IR: up to 80 m; White Light: up to 50 m                                                                                                                                           |
| IR Wavelength           | 850 nm                                                                                                                                                                                                                                         |
| HEOP                    |                                                                                                                                                                                                                                                |
| Open Resources          | Memory: 60 MB,<br>Smart RAM: 371 MB,<br>eMMC: 2 GB                                                                                                                                                                                             |
| Computing Power         | 1.5 TOPS                                                                                                                                                                                                                                       |
| Open Capability         | HEOP 2.0 OpenDevSDK, Basic service, basic media capability, deep learning reasoning acceleration capability                                                                                                                                    |
| Deep Learning Structure | Caffe, PyTorch, TensorFlow, PaddlePaddle, ONNX                                                                                                                                                                                                 |
| Programming Language    | C                                                                                                                                                                                                                                              |
| AI Open Platform        |                                                                                                                                                                                                                                                |
| Model Specification     | Supports 4 model packages, and each model package supports detecting 16 target types and classifying 4 targets. The targets can be classified as 64 types. The device runs only 1 model at the same time.<br>Built-in Hard Hat Detection       |
| Video                   |                                                                                                                                                                                                                                                |
| Main Stream             | 50 Hz : 20 fps ( 3840 × 2160 , 3072 × 1728 , 2560 × 1440 , 1920 × 1080 , 1280 × 720 )<br>60 Hz : 24 fps ( 3840 × 2160 , 3072 × 1728 , 2560 × 1440 , 1920 × 1080 , 1280 × 720 )                                                                 |
| Sub-Stream              | 50 Hz : 20 fps ( 704 × 576 , 640 × 480 )<br>60 Hz : 24 fps ( 704 × 480 , 640 × 480 )                                                                                                                                                           |

|                             |                                                                                                                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Third Stream                | 50 Hz : 10 fps ( 1920×1080 , 1280×720 , 704×576 , 640×480 )<br>60 Hz : 10 fps ( 1920×1080 , 1280×720 , 704×480 , 640×480 )                                                                                                                                                       |
| Fourth Stream               | 50 Hz: 10 fps (1280×720, 640×480, 640×360)<br>60 Hz: 10 fps (1280×720, 640×480, 640×360)                                                                                                                                                                                         |
| Video Compression           | Main stream: H.265/H.264,<br>Sub-stream: H.265/H.264/MJPEG,<br>Third stream: H.265/H.264,<br>Fourth stream: H.265/H.264/MJPEG                                                                                                                                                    |
| Video Bit Rate              | 32 Kbps to 8 Mbps                                                                                                                                                                                                                                                                |
| H.264 Type                  | Baseline Profile, Main Profile, High Profile                                                                                                                                                                                                                                     |
| H.265 Type                  | Main Profile                                                                                                                                                                                                                                                                     |
| Bit Rate Control            | CBR, VBR                                                                                                                                                                                                                                                                         |
| Scalable Video Coding (SVC) | H.264 and H.265 encoding                                                                                                                                                                                                                                                         |
| Region of Interest (ROI)    | 5 fixed regions for main stream                                                                                                                                                                                                                                                  |
| Target Cropping             | Yes                                                                                                                                                                                                                                                                              |
| <b>Audio</b>                |                                                                                                                                                                                                                                                                                  |
| Audio Type                  | Mono sound                                                                                                                                                                                                                                                                       |
| Audio Compression           | G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/AAC_LC/MP3                                                                                                                                                                                                                           |
| Audio Bit Rate              | 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)                                                                                                                                                |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/48 kHz                                                                                                                                                                                                                                                       |
| Environment Noise Filtering | Yes                                                                                                                                                                                                                                                                              |
| <b>Network</b>              |                                                                                                                                                                                                                                                                                  |
| Protocols                   | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SFTP, ARP, SNMP, WebSocket, WebSockets, RTCP                                                                                           |
| Simultaneous Live View      | Up to 20 channels                                                                                                                                                                                                                                                                |
| API                         | Open Network Video Interface (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-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, TLS1.2, TPM 2.0(FIPS 140-2 level 2) |
| Network Storage             | NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)                                                                                                                                                                                                                            |
| Client                      | iVMS-4200, Hik-Connect, Hik-Central                                                                                                                                                                                                                                              |
| Web Browser                 | Plug-in required live view: IE 10, IE 11<br>Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+<br>Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+                                                                                                    |
| <b>Image</b>                |                                                                                                                                                                                                                                                                                  |
| Image Parameters Switch     | Yes                                                                                                                                                                                                                                                                              |
| Image Settings              | Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, AGC, adjustable by client software or web browser                                                                                                                                                 |
| Day/Night Switch            | Day, Night, Auto, Schedule, Alarm Trigger, Video Trigger                                                                                                                                                                                                                         |
| Wide Dynamic Range (WDR)    | 120 dB                                                                                                                                                                                                                                                                           |
| SNR                         | ≥ 52 dB                                                                                                                                                                                                                                                                          |

|                                  |                                                                                                                                                                                                                                                                                                                                                       |
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| Image Enhancement                | BLC,HLC,3D DNR,Distortion Correction                                                                                                                                                                                                                                                                                                                  |
| <b>Interface</b>                 |                                                                                                                                                                                                                                                                                                                                                       |
| Ethernet Interface               | 1 RJ45 10 M/100 M self-adaptive Ethernet port                                                                                                                                                                                                                                                                                                         |
| On-Board Storage                 | Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 512 GB,<br>*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.                                                                                            |
| Built-in Microphone              | 2 built-in microphones                                                                                                                                                                                                                                                                                                                                |
| Audio                            | 1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input impedance: 4.7 K $\Omega$ , interface type: non-equilibrium,<br>1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output impedance: 100 $\Omega$ , interface type: non-equilibrium                                                       |
| Alarm                            | 1 input, 1 output (max. 24 VDC, 1 A)                                                                                                                                                                                                                                                                                                                  |
| RS-485                           | 1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)                                                                                                                                                                                                                                                                                    |
| Fiber Optical                    | FC interface, built-in fiber module (155M, TX1310/RX1550nm wavelength, single module fiber, up to 20 km transmission distance)                                                                                                                                                                                                                        |
| <b>Event</b>                     |                                                                                                                                                                                                                                                                                                                                                       |
| Basic Event                      | Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)                                                                                                                                           |
| Smart Event                      | Unattended baggage detection, object removal detection, scene change detection, audio exception detection, defocus detection                                                                                                                                                                                                                          |
| Linkage                          | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning, white light flashing                                                                                                                                                                                |
| <b>Deep Learning Function</b>    |                                                                                                                                                                                                                                                                                                                                                       |
| Perimeter Protection             | Line crossing, intrusion, region entrance, region exiting<br>Support alarm triggering by specified target types (human and vehicle)                                                                                                                                                                                                                   |
| Face Capture                     | Detects up to 10 faces simultaneously,<br>Supports swing left and right from -60° to -60°, tilt up and down from -30° to -30°,<br>Uploads face with background and closed-up face pictures                                                                                                                                                            |
| <b>General</b>                   |                                                                                                                                                                                                                                                                                                                                                       |
| Power                            | 100V~240V , 0.5-0.2A , MAX : 16 W ; PoE : IEEE 802.3at , 42.5 V~57 V , 0.43 A~0.32 A , MAX : 16 W                                                                                                                                                                                                                                                     |
| Material                         | SUS316L with anti-corrosion coating                                                                                                                                                                                                                                                                                                                   |
| Dimension                        | 157.6 mm × 195.1 mm × 294 mm (6.2" × 7.7" × 11.6")                                                                                                                                                                                                                                                                                                    |
| Package Dimension                | 452 mm × 235 mm × 272 mm (17.8" × 9.3" × 10.7")                                                                                                                                                                                                                                                                                                       |
| Weight                           | Approx. 5500 g (12.1 lb.)                                                                                                                                                                                                                                                                                                                             |
| With Package Weight              | Approx. 6500 g (14.3 lb.)                                                                                                                                                                                                                                                                                                                             |
| Startup and Operating Conditions | -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                             |
| Language                         | 33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian |
| Cable Length                     | Armored Cable: 1.3 or 5 or 10m m (4.26 ft. or 16.40 or 32.81 ft.)                                                                                                                                                                                                                                                                                     |

| Approval                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC                        | CE-EMC: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021, RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue 7, KC: KN32: 2015, KN35: 2015, FCC: 47 CFR Part 15, Subpart B                                                                                                                                                                                                          |
| Safety                     | CB: IEC 62368-1: 2014+A11, CE-LVD: EN 62368-1: 2014/A11: 2017, BIS: IS 13252 (Part 1): 2010/IEC 60950-1: 2005, LOA: IEC/EN 60950-1                                                                                                                                                                                                                                                                                                               |
| Protection                 | IK10: IEC 62262:2002, IP66: IEC 60529-2013, IP68: IEC 60529-2013                                                                                                                                                                                                                                                                                                                                                                                 |
| Explosion-Proof Protection | ATEX: Ex II 2 G D Ex db ib IIC T6 Gb/Ex ib tb IIIC T80 °C Db IP68<br>IECEx: Ex db ib IIC T6 Gb/Ex ib tb IIIC T80 °C Db IP68<br>For explosive gas atmospheres, the maximum surface temperature is 85 °C;<br>For flammable dust atmospheres, the maximum surface temperature is 80 °C;<br>IIC: for explosive gas atmospheres other than mines susceptible to firedamp;<br>For explosive gas mixture atmospheres: Zone 1, Zone 2, Zone 21, Zone 22. |

## ▪ 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.

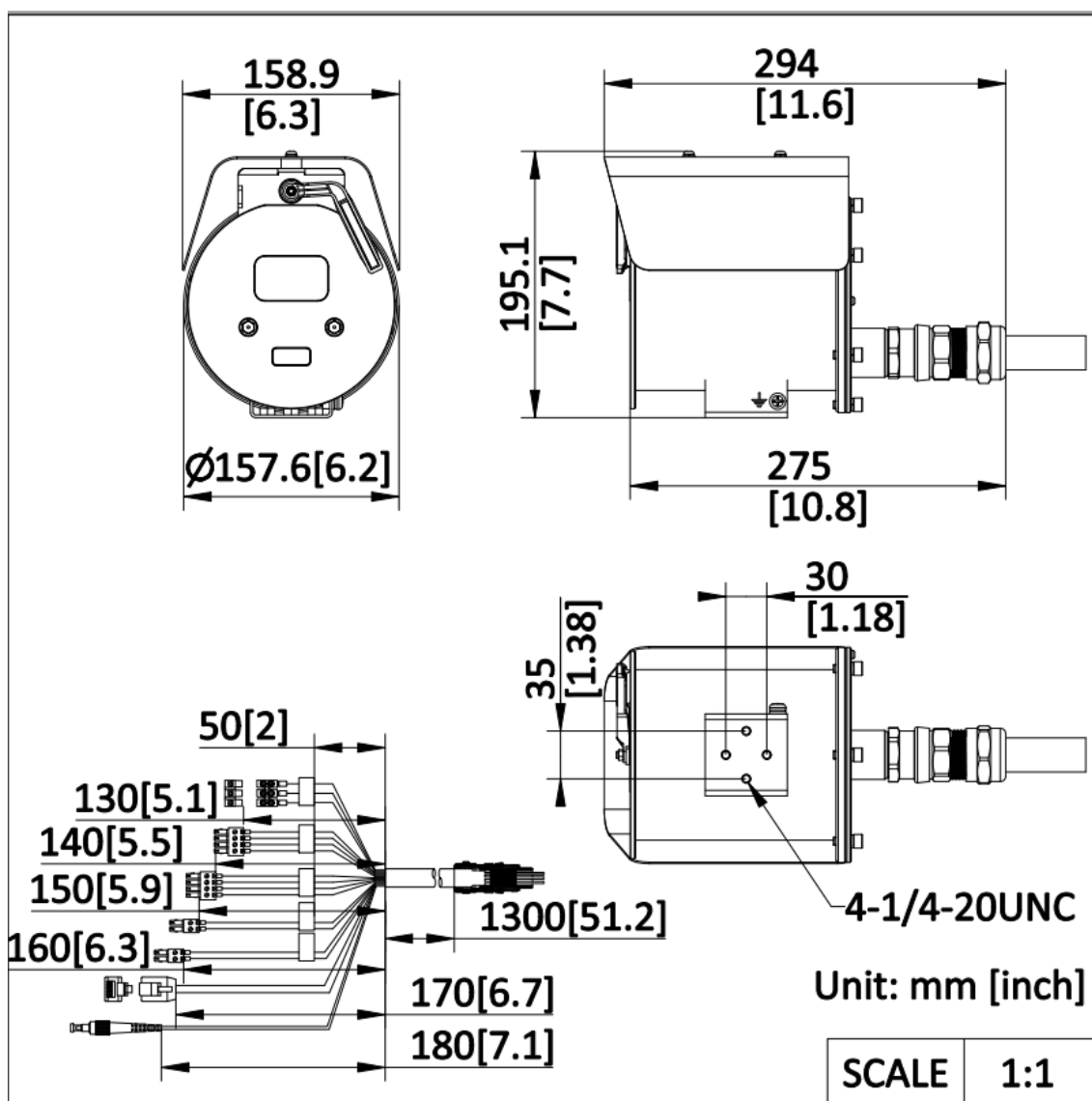
This model has top-level protection.

| 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.                                                                                                                                  |

## ▪ Available Model

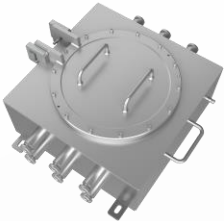
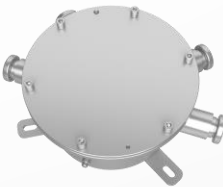
DS-2XE6686G0-LIZHRSU(316L)(2812)O-STD  
DS-2XE6686G0-LIZHRSU(316L)(2812)O-NEU  
DS-2XE6686G0-LIZHRSU(316L)(2812)5mO-STD  
DS-2XE6686G0-LIZHRSU(316L)(2812)10mO-STD  
DS-2XE6686G0-LIZHRSU(316L)(2812)10mO-NEU  
DS-2XE6686G0-LIZHRSU(316L)(0832)O-STD  
DS-2XE6686G0-LIZHRSU(316L)(0832)10mO-STD  
DS-2XE6686G0-LIZHRSU(316L)(0832)10mO-NEU  
DS-2XE6686G0-LIZHRSU(316L)(0832)O-NEU  
DS-2XE6686G0-LIZHRSU(316L)(0832)5mO-STD

## ▪ Dimension



▪ Accessory

▪ Optional

| DS-4401ZJ-GY38SL<br>YHinge                                                          | DS-1712ZJ                                                                           | DS-2XE2707CB-M1<br>2(316L)                                                          | DS-1751ZJ-AC(OS)                                                                      | DS-2XE2705-M04(3<br>16L)                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |

# See Far, Go Further



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