

## DS-2XC6646G0/P-IZH(R)S 316L 4MP Anti-Corrosion Vari-focal Bullet



- High quality imaging with 4 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 120 dB WDR technology
- License Plate Recognition
- Efficient H.265+ compression technology to save bandwidth and storage
- 5 streams to meet a wide variety of applications
- Water and dust resistant (IP67)
- 316L stainless steel enclosure, protecting cameras to be used in corrosive environments, providing reliability and longevity compared to standard cameras
- A built-in wiper(-R) removes water and dust on the screen and ensures clear images when the camera is used in dusty or damp environments

## ▪ **Function**

### Road Traffic and Vehicle Detection

With embedded deep learning based license plate capture and recognition algorithms, the camera alone can achieve plate capture and recognition. The algorithm enjoys the high recognition accuracy of common plates and complex-structured plates, which is a great step forward comparing to traditional algorithms. Blocklist and allowlist are available for plate categorization and separate alarm triggering.

## ▪ Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	2688 × 1520
Min. Illumination	Color: 0.0005 Lux @ (F1.2, AGC ON), B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR
Shutter Time	1 s to 1/100,000 s
Day & Night	IR cut filter Blue glass module to reduce ghost phenomenon
Lens	
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 100.8° to 40.2°, vertical FOV 53.3° to 22.5°, diagonal FOV 122.3° to 46.2° 8 to 32 mm, horizontal FOV 40.7° to 14.6°, vertical FOV 22.3° to 8.3°, diagonal FOV 47.4° to 16.7°
Focus	Auto, semi-auto, manual
Aperture	2.8 to 12 mm: F1.38 to F2.5 8 to 32 mm: F1.7
DORI	
DORI	Wide: 2.8 to 12 mm: D: 60 m, O: 23.8 m, R: 12 m, I: 6 m 8 to 32 mm: D: 150.3 m, O: 59.7 m, R: 30.1 m, I: 15 m Tele: 2.8 to 12 mm: D: 149 m, O: 59.1 m, R: 29.8 m, I: 14.9 m 8 to 32 mm: D: 400 m, O: 158.7 m, R: 80 m, I: 40 m
Illuminator	
Supplement Light Type	IR
Supplement Light Range	2.8 to 12 mm: 60 m 8 to 32 mm: 100 m
Smart Supplement Light	Yes
IR Wavelength	850 nm
Video	
Main Stream	50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Fourth Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream/Fourth stream/Fifth stream: H.265/H.264/MJPEG Third stream: H.265/H.264
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.265 and H.264 encoding
Region of Interest (ROI)	5 fixed regions for each stream
Target Cropping	Yes
<b>Audio</b>	
Audio Type	Mono sound
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC-LC/MP3
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	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Environment Noise Filtering	Yes
<b>Network</b>	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS, WebSocket, WebSockets
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-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR) Together with high-end Hikvision memory card, memory card encryption and health detection are supported.
Client	iVMS-4200, Hik-Connect, Hik-Central
Web Browser	Plug-in required live view: IE10, IE11 Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 12+ Local service: Chrome 57.0+, Firefox 52.0+
<b>Image</b>	
Image Parameters Switch	Yes
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance 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
Image Enhancement	BLC, HLC, Defog, 3D DNR
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
Image Stabilization	EIS
<b>Interface</b>	
Ethernet Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB

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; 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 or max. 110 VAC, 500 mA)
RS-485	Without -R: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive) -R: does not support
Reset Key	Yes
Wiegand	/P: 1 Wiegand (CardID 26bit, SHA-1 26bit, Hik 34bit, NEWG 72bit)
<b>Event</b>	
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection (support alarm triggered by specified target types (human and vehicle)) 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
<b>Deep Learning Function</b>	
Road Traffic and Vehicle Detection	Blocklist and allowlist: up to 10,000 records Captures vehicle that has no license plate Support license plate recognition of motorcycles (only in checkpoint scenario) Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.)
People Counting	Yes
Queue Management	Supports up to 8 detection regions, and independent arming schedule and linkage method Supports 2 detection modes: regional people queuing-up, waiting time detection Generates reports to compare the efficiency of different queuing-ups and display the changing status of one queue Supports raw data export for further analysis Supports real-time data uploading and scheduled data uploading Regional people queuing-up: supports 4 alarm trigger conditions, including greater than threshold, less than threshold, equal to threshold, not equal to threshold Waiting time detection: supports 1 alarm trigger condition, including greater than threshold
Heat Map	A graphic description of visits (by calculating amount of people or amount of dwell time) in a configured area. Two report types are available, space heat map and time heat map line chart.
Metadata	Metadata of road traffic is supported.

Regional People Counting	<p>Supports up to 8 detection regions, and independent arming schedule and linkage method</p> <p>Supports 3 detection modes: people density detection, number of people exception detection, waiting time exception detection</p> <p>Supports parameter settings: alarm times per exception, alarm interval, first alarm delay</p> <p>Supports searching real-time number of people</p> <p>People density detection: supports scheduled uploading, number of people change uploading, congestion level uploading</p> <p>Number of people exception detection: supports 6 alarm trigger conditions, including greater than threshold A, less than threshold A, equal to threshold A, not equal to threshold A, greater than threshold A and less than threshold B, less than threshold A or greater than threshold B (threshold A should be less than threshold B)</p> <p>Waiting time exception detection: supports 3 alarm trigger conditions, including greater than threshold A, less than threshold A, greater than threshold A and less than threshold B (threshold A should be less than threshold B)</p>
On/Off Duty Detection	<p>Supports up to 8 detection regions, and independent arming schedule and linkage method</p> <p>Supports 2 detection modes: absence detection, on/off duty detection</p> <p>Supports parameter settings: person on duty, absence duration</p>
<b>General</b>	
Power	<p>12 VDC <math>\pm</math> 20%, 1.8 A, max. 22 W, three-core terminal block</p> <p>PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V), 0.5 A to 0.4 A, max. 22 W</p>
Material	316L and anti-corrosion coating
Dimension	With -R: 240.9 mm $\times$ 145 mm $\times$ 166.6 mm (9.5" $\times$ 5.7" $\times$ 6.6") Without -R: 224 mm $\times$ 145 mm $\times$ 143.5 mm (8.8" $\times$ 5.7" $\times$ 5.6")
Package Dimension	477 mm $\times$ 235 mm $\times$ 302 mm (18.7" $\times$ 9.3" $\times$ 11.9")
Weight	<p>With -R: approx. 4265 g (9.4 lb.)</p> <p>Without -R: approx. 3710 g (8.2 lb.)</p>
With Package Weight	<p>With -R: approx. 5115 g (11.3 lb.)</p> <p>Without -R: approx. 4560 g (10.1 lb.)</p>
Storage Conditions	-40 $^{\circ}$ C to 60 $^{\circ}$ C (-40 $^{\circ}$ F to 140 $^{\circ}$ F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-40 $^{\circ}$ C to 60 $^{\circ}$ C (-40 $^{\circ}$ F to 140 $^{\circ}$ 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
General Function	Anti-banding, 5 streams, heartbeat, mirror, privacy mask, flash log, password reset via email, pixel counter
Heater	Yes
Wiper	-R: Yes

Approval	
EMC	FCC: 47 CFR Part 15, Subpart B CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EEN 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 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
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 (without -R)
Anti-Corrosion Protection	NEMA 4X: NEMA 250-2018

## ▪ 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

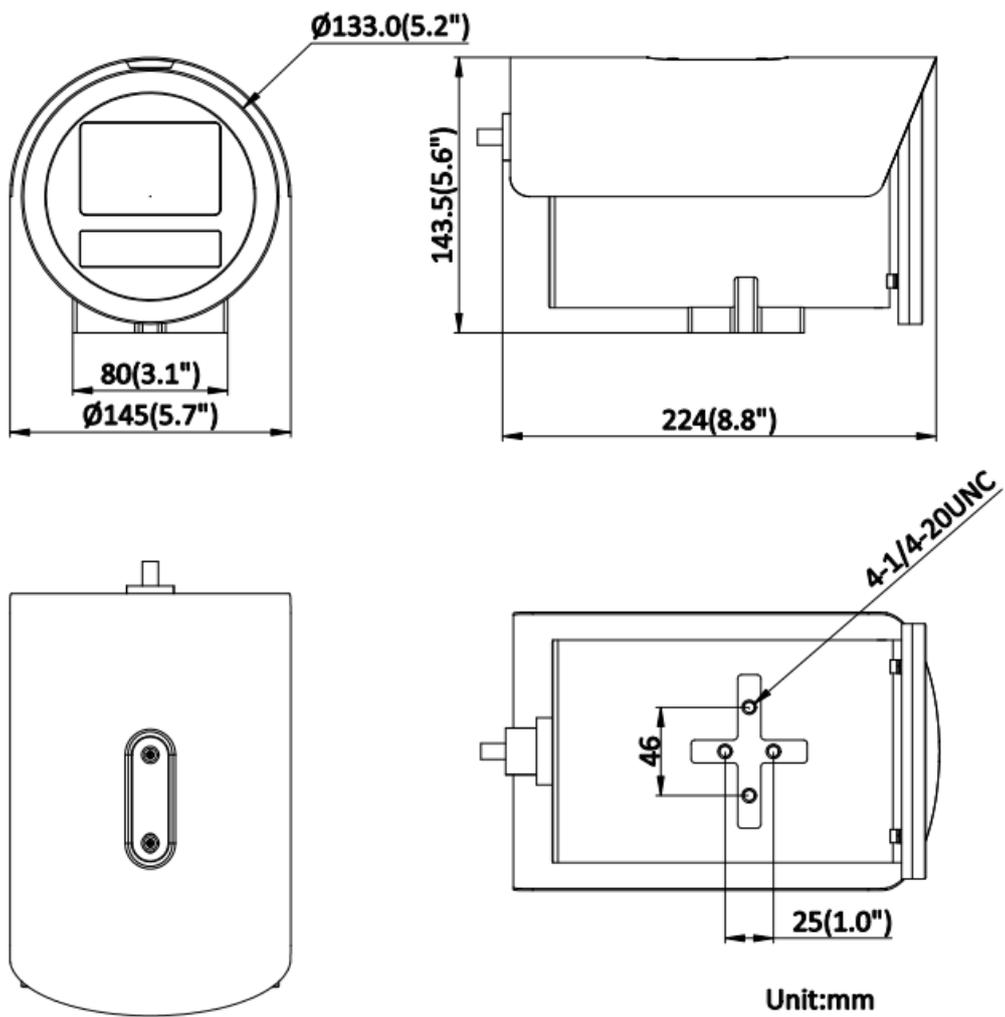
DS-2XC6646G0/P-IZHRS(2.8-12mm)

DS-2XC6646G0/P-IZHRS(8-32mm)

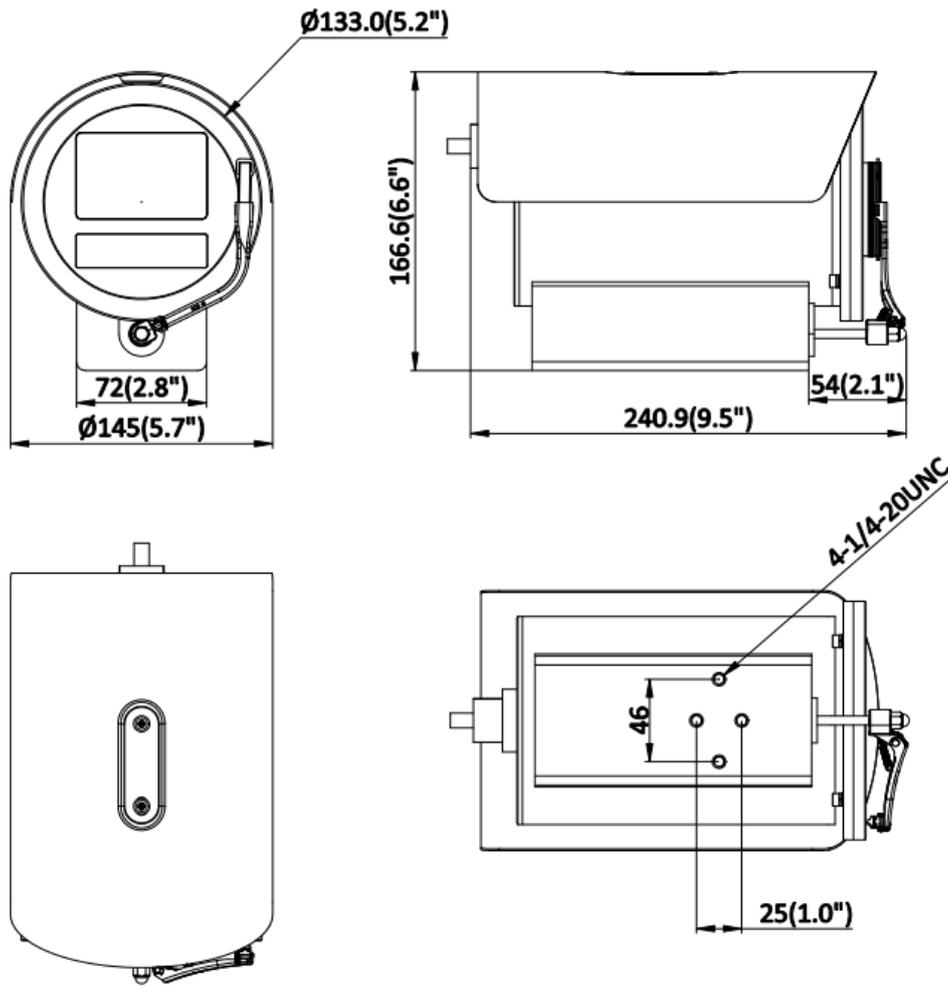
DS-2XC6646G0/P-IZHS(8-32mm)

DS-2XC6646G0/P-IZHS(2.8-12mm)

## ▪ Dimension



With-R Model



Unit:mm(inch)

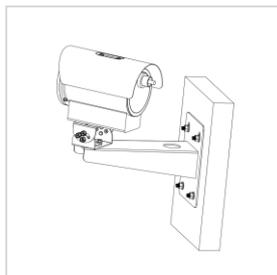
With-R Model

- Accessory
- Optional

DS-1751ZJ-AC(OS)	DS-1704ZJ-Y-AC(OS)
	

- Installation Methods

Wall Mounting  
DS-1704ZJ-Y-AC(OS)



# See Far, Go Further



[www.hikvision.com](http://www.hikvision.com)  
[support@hikvision.com](mailto:support@hikvision.com)

