

### 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		
	2.8 to 12 mm, horizontal FOV 100.8° to 40.2°, vertical FOV 53.3° to 22.5°, diagnol FOV	
Focal Longth & FOV	122.3° to 46.2°	
Focal Length & FOV	8 to 32 mm, horizontal FOV 40.7° to 14.6°, vertical FOV 22.3° to 8.3°, diagnol FOV 47.4°	
	to 16.7°	
Focus	Auto, semi-auto, manual	
Aportura	2.8 to 12 mm: F1.38 to F2.5	
Aperture	8 to 32 mm: F1.7	
DORI		
	Wide:	
	2.8 to 12 mm: D: 60 m, O: 23.8 m, R: 12 m, I: 6 m	
DON	8 to 32 mm: D: 150.3 m, O: 59.7 m, R: 30.1 m, I:15 m	
DORI	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	
Cunnioment Light Dange	2.8 to 12 mm: 60 m	
Supplement Light Range	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)	
Main Stream	60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)	
Sub-Stream	50 Hz: 25 fps (704 × 576,640 × 480)	
Sub-Stream	60 Hz: 30 fps (704 × 480, 640 × 480)	
The and Change and	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)	
Third Stream	60 Hz: 10 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)	
Farreth Chappin	50 Hz: 25 fps (704 × 576,640 × 480)	
Fourth Stream	60 Hz: 30 fps (704 × 480,640 × 480)	
Fifth Ctrop	50 Hz: 25 fps (704 × 576,640 × 480)	
Fifth Stream	60 Hz: 30 fps (704 × 480,640 × 480)	
	Main stream: H.265+/H.265/H.264+/H.264	
Video Compression	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	
Audio		
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	
Network		
	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP,	
Protocols	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	
0361/11031	Password protection, complicated password, HTTPS encryption, 802.1X authentication	
	(EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest	
Security	authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network	
Security		
	Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2	
	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)	
Network Storage	Together with high-end Hikvision memory card, memory card encryption and health	
Network Storage	detection are supported.	
Cl: and	•	
Client	iVMS-4200, Hik-Connect, Hik-Central	
Web Downson	Plug-in required live view: IE10, IE11	
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari12+	
	Local service: Chrome 57.0+, Firefox 52.0+	
Image		
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	
Interface		
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	



	1 input (linein), two-core terminal block, max. input amplitude: 3.3 Vpp, input	
Audio	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)	
7 11 11 11	Without -R: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)	
RS-485	-R: does not support	
Reset Key	Yes	
Wiegand	/P: 1 Wiegand (CardID 26bit, SHA-1 26bit, Hik 34bit, NEWG 72bit)	
Event		
	Motion detection, video tampering alarm, exception (network disconnected, IP	
Basic Event	address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality	
	diagnosis, vibration detection	
	Line crossing detection, intrusion detection, region entrance detection, region exiting	
Smart Event	detection (support alarm triggered by specified target types (human and vehicle))	
	Scene change detection, audio exception detection, defocus detection	
	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarn	
Linkage	output, trigger recording, trigger capture, audible warning	
Deep Learning Function	1 / 35 3/ 55 1 /	
	Blocklist and allowlist: up to 10,000 records	
	Captures vehicle that has no license plate	
Road Traffic and Vehicle	Support license plate recognition of motorcycles (only in checkpoint scenario)	
Detection	Support vehicle attribute detection, including vehicle type, color, brand, etc. (City	
	Street mode is recommended.)	
People Counting	Yes	
	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	
Queue Management	Supports raw data export for further analysis	
Queue Management	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.	
Moto do to		
Metadata	Metadata of road traffic is supported.	



Wiper	-R: Yes	
Heater	Yes	
General Function	email, pixel counter	
Language	Anti-banding, 5 streams, heartbeat, mirror, privacy mask, flash log, password reset via	
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian	
	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese,	
	Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,	
Conditions	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian	
Startup and Operating	-40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)	
Storage Conditions	-40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)	
With Package Weight	WIthout -R: approx. 4560 g (10.1 lb.)	
With Package Weight	With -R: approx. 5115 g (11.3 lb.)	
Weight	Without -R: approx. 3710 g (8.2 lb.)	
\Moight	With -R: approx. 4265 g (9.4 lb.)	
Package Dimension	477 mm × 235 mm × 302 mm (18.7" × 9.3" × 11.9")	
Dimension	145 mm × 143.5 mm (8.8" × 5.7" × 5.6")	
	With -R: 240.9 mm × 145 mm × 166.6 mm (9.5" × 5.7" × 6.6")Without -R: 224 mm ×	
Material	316L and anti-corrosion coating	
Power	12 VDC ± 20%, 1.8 A, max. 22 W, three-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V), 0.5 A to 0. 4 A, max. 22 W	
General		
	Supports parameter settings: person on duty, absence duration	
- ,	Supports 2 detection modes: absence detection, on/off duty detection	
On/Off Duty Detection	method	
	Supports up to 8 detection regions, and independent arming schedule and linkage	
	threshold B (threshold A should be less than threshold B)	
Regional People Counting	greater than threshold A, less than threshold A, greater than threshold A and less than	
	Waiting time exception detection: supports 3 alarm trigger conditions, including	
	or greater than threshold B (threshold A should be less than threshold B)	
	threshold A, greater than threshold A and less than threshold B, less than threshold A	
	greater than threshold A, less than threshold A, equal to threshold A, not equal to	
	Number of people exception detection: supports 6 alarm trigger conditions, including	
	uploading, congestion level uploading	
	People density detection: supports scheduled uploading, number of people change	
	Supports searching real-time number of people	
	delay	
	Supports parameter settings: alarm times per exception, alarminterval, first alarm	
	Supports 3 detection modes: people density detection, number of people exception detection, waiting time exception detection	
	method	



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	
	UL: UL 62368-1	
	CB: IEC 62368-1:2014+A11	
Safety	CE-LVD: EN 62368-1:2014/A11:2017	
	BIS: IS 13252(Part 1):2010/IEC 60950-1: 2005	
	LOA: IEC/EN 60950-1	
	CE-RoHS: 2011/65/EU	
Environment	WEEE: 2012/19/EU	
	Reach: Regulation (EC) No 1907/2006	
Protection	IP67:IEC 60529-2013	
Trottetton	IK10:IEC 62262: 2002 (without -R)	
Anti-Corrosion Protection	NEMA 4X: NEMA 250-2018	
	C5-M: 720H neutral saltspray, 480H water condensation;	
	Exterior environments: industrial areas with high humidity and aggressive atmosphere	
	and coastal areas with high salinity;	
	Interior environments: buildings or areas with almost permanent condensation and	
	with high pollution.	

#### 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
	Hikvision products at this level are equipped for use in
Top-level protection	areas where professional anti-corrosion protection is a
Top-rever protection	must. Typical application scenarios include coastlines,
	docks, chemical plants, and more.
	Hikvision products at this level are equipped for use in
	areas with moderate anti-corrosion demands. Typical
Moderate protection	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
No specific protection	areas where no specific anti-corrosion protection is needed.

#### Available Model

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

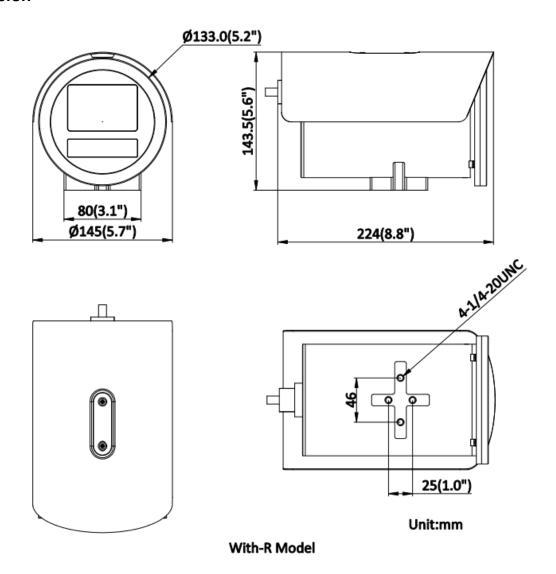
DS-2XC6646G0/P-IZHRS(2.8-12mm)

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

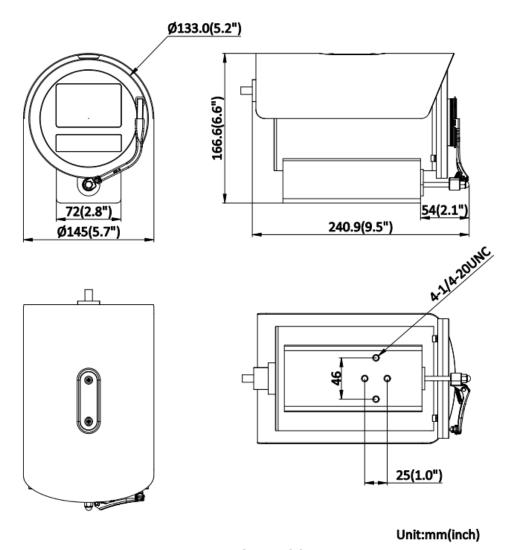
DS-2XC6646G0/P-IZHRS(8-32mm)



## Dimension







With-R Model

- Accessory
- Optional



Installation Methods

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





# See Far, Go Further



www.hikvision.com support@hikvision.com















