

# DS-2CD5A46G0-IZ/UH 4 MP Varifocal Bullet Network Camera















- 1/1.8" Progressive Scan CMOS
- 2560 × 1440 @ 30 fps
- 2.8 to 12 mm motorized lens
- H.265, H.265+, H.264, H.264+
- 5 defined streams and up to 5 custom streams
- 140dB WDR
- IP67
- Built-in microSD/SDHC/SDXC card slot, up to 256 GB

- Metadata of intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, and object removal are supported.
- The camera adopts low-temperature resistant material. It can set up and work properly under the environment of -60 °C (-76 °F) by using the temperature control method to heat the chip and sensor components, and improving camera 's internal heating cycle design. The camera also supports front glass heating and defog function.





## **Function**

#### **Smooth Streaming**

Smooth streaming offers solutions to improve the video quality in different network conditions. For example, in poor network conditions, adapting to the detected real-time network condition, streaming bit rate and resolution are automatically adjusted to avoid mosaic and lower latency in live view; in multiplayer network conditions, the camera transmits the redundant data for the self-error correcting in back-end device, so that to solve the mosaic problem because of the packet loss and error rate.

#### Metadata

Metadata uses individual instances of application data or the data content. Metadata can be used for third-party application development.



# Specifications

Camera		
Image Sensor	1/1.8" Progressive Scan CMOS	
Min. Illumination	Color: 0.0036 Lux @ (F1.6, AGC ON), 0 Lux with IR	
Shutter Speed	1 s to 1/100,000 s	
Slow Shutter	Yes	
Day & Night	IR Cut Filter	
Wide Dynamic Range	140 dB	
Angle Adjustment	Bracket, pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°	
Lens		
Lens Type	Motorized lens, 2.8 to 12 mm	
Aperture	F1.6	
Focus	Semi-auto	
FOV	Horizontal FOV 103.9° to 44.3°, vertical FOV 56.3° to 24.8°, diagonal FOV 122° to 51°	
Lens Mount	Ф14	
Illuminator		
IR Range	Up to 50 m	
Wavelength	850 nm	
Video		
Max. Resolution	2560 × 1440	
Video Stream	5 defined streams and up to 5 custom stream	
Main Stream	50Hz: 25fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60Hz: 30fps (2560 × 1440, 1920 × 1080, 1280 × 720)	
Sub Stream	50Hz: 25fps (704 × 576, 640 × 480) 60Hz: 30fps (704 × 480, 640 × 480)	
Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)	
Fourth Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)	
Fifth Stream	50Hz: 25fps (704 × 576, 640 × 480) 60Hz: 30fps (704 × 480, 640 × 480)	
Custom Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)	
Video Compression	Main stream: H.265/H.264/H.265+/H.264+ Sub stream/third stream/fourth stream/fifth stream/custom stream: H.265/H.264/MJPEG	
H.264 Type	Baseline Profile/Main Profile/High Profile	
H.264+	Main stream supports	
H.265 Type	Main Profile	
H.265+	Main stream supports	
Video Bit Rate	32 Kbps to 16 Mbps	
Scalable Video Coding (SVC)	H.265 and H.264 support	
Smart Feature-set		
Smart Event	Line crossing detection, up to 4 lines configurable Intrusion detection, up to 4 regions configurable Region entrance detection, up to 4 regions configurable	



	Region exiting detection, up to 4 regions configurable
	Unattended baggage detection, up to 4 regions configurable Object removal detection, up to 4 regions configurable
	Face detection: detects faces and upload images
	Scene change detection, defocus detection
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Statistics	Counting
Linkage Method	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture
Region of Interest	Main stream/sub stream/third stream/fourth stream/fifth stream: 4 fixed regions for each stream
Image	
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, Distortion Correction
Image Setting	Rotate mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable by client software or web browser
Target Cropping	Yes
Day/Night Switch	Day/Night/Auto/Schedule
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
Network	
Network Storage	microSD/SDHC/SDXC card (256 GB), local storage and NAS (NFS, SMB/CIFS), ANR Together with high-end Hikvision memory card, memory card encryption and health detection are supported.
API	ONVIF (PROFILE S, PROFILE G), ISAPI, SDK
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
Smooth Streaming	Yes
Security Measures	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 ONVIF, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.2
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users. 3 user levels: administrator, operator and user
Client	iVMS-4200, Hik-Connect, Hik-Central
Web Browser	Plug-in required live view: IE8+, Chrome 41.0-44, Mozilla Firefox30.0-51, Safari8.0-11 Plug-in free live view: Chrome 45+, Mozilla Firefox52+
Interface	
Communication Interface	1 RJ45 10M/100M/1000M Ethernet port
Video Output	1Vp-p composite output (75 Ω/CVBS), only for adjustment
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
General	
Firmware Version	5.5.92
Web Client Language	32 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)
Embedded Open Platform	Yes. The camera supports installation and running up to 4 extra applications.
General Function	Anti-flicker, 5 streams and up to 5 custom streams, heartbeat, mirror, password protection, privacy mask, flash log, password reset via e-mail, pixel counter, control timeout setting
Reset	Reset via reset button on camera body, web browser and client software



Startup and Operating Conditions	-60 °C to 60 °C (-76 °F to 140 °F), humidity 95% or less (non-condensing)	
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F), humidity 95% or less (non-condensing)	
Power Supply	12 VDC ± 10%, three-core terminal block, reverse polarity protection	
Power Consumption and Current	12 VDC, 3.84 A, max. 46 W	
Heater	Yes	
Material	Metal	
Dimensions	Camera: $\Phi$ 140 × 368 mm ( $\Phi$ 5.5" × 14.5") With package: $405 \times 190 \times 180$ mm ( $15.9$ " × $7.5$ " × $7.1$ ")	
Weight	Camera: approx. 1.9 kg (5.1 lb.) With package: approx. 2.45 kg (6.6 lb.)	
Approval		
EMC	47 CFR Part 15, Subpart B; EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014	
Safety	EN 60950-1:2005 + Am 1:2009 + Am 2:2013	
Chemistry	2011/65/EU, 2012/19/EU, Regulation (EC) No 1907/2006	
Protection	Ingress protection: IP67 (IEC 60529-2013)	

<sup>\*</sup> Listed resolutions are only selectable options. It does not mean that all streams can work at their maximum resolution at the same time.

### **Available Model**

DS-2CD5A46G0-IZ/UH (2.8 to 12 mm)

## Typical Application

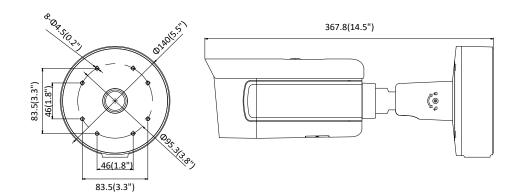
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

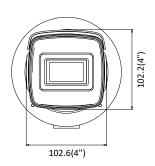
This model has NO SPECIFIC PROTECTION.

Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-
	corrosion protection is a must. Typical application scenarios include coastlines,
	docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-
	corrosion demands. Typical application scenarios include coastal areas about 2
	kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.
No specific	Hikvision products at this level are equipped for use in areas where no specific anti-
protection	corrosion protection is needed.



# Dimension





Unit: mm[inch]

# Accessory



DS-1475ZJ-SUS Vertical Pole Mount



DS-1476ZJ-SUS Corner Mount





# *HIKVISION*°

#### Headquarters

No.555 Qianmo Road, Binjiang District, Hangzhou 310051, China T +86-571-8807-5998 overseasbusiness@hikvision.com

Hikvision USA T+1-909-895-0400 sales.usa@hikvision.com

Hikvision Australia T +61-2-8599-4233 salesau@hikvision.com

Hikvision India T+91-22-28469900 sales@pramahikvision.com

Hikvision Canada T+1-866-200-6690 sales.canada@hikvision.com

Hikvision Thailand T +662-275-9949 sales.thailand@hikvision.com Hikvision Europe T +31-23-5542770 sales.eu@hikvision.com

Hikvision Italy T +39-0438-6902 info.it@hikvision.com

Hikvision Brazil T +55 11 3318-0050 Latam.support@hikvision.com

Hikvision Turkey T +90 (216)521 7070- 7074 sales.tr@hikvision.com

Hikvision Malaysia T+601-7652-2413 sales.my@hikvision.com

Hikvision UK & Ireland T +01628-902140 sales.uk@hikvision.com

Hikvision South Africa Tel: +27 (10) 0351172 sale.africa@hikvision.com

Hikvision France T +33(0)1-85-330-450 info.fr@hikvision.com

Hikvision Kazakhstan T +7-727-9730667 nikia.panfilov@hikvision.ru

Hikvision Vietnam T +84-974270888 sales.vt@hikvision.com Hikvision UAE T +971-4-4432090 salesme@hikvision.com

Hikvision Singapore T +65-6684-4718 sg@hikvision.com

Hikvision Spain T +34-91-737-16-55 info.es@hikvision.com

Hikvision Tashkent T +99-87-1238-9438 uzb@hikvision.ru

Hikvision Hong Kong T +852-2151-1761 info.hk@hikvision.com Hikvision Russia T +7-495-669-67-99 saleru@hikvision.com

**Hikvision Korea** T +82-(0)31-731-8817 sales.korea@hikvision.com

Hikvision Poland T +48-22-460-01-50 info.pl@hikvision.com

Hikvision Indonesia T +62-21-2933759 Sales.Indonesia@hikvision.com

Hikvision Colombia sales.colombia@hikvision.com