



## DS-2CD5A46G0-IZ(H)S 4 MP IR Varifocal Bullet Network Camera



# 114-029B





- 1/1.8" Progressive Scan CMOS
- 2560 × 1440 @ 30fps
- MJPEG up to 1920 × 1080 @ 30fps
- 2.8 to 12 mm/8 to 32 mm motorized lens
- Color: 0.002 Lux @ (F1.2, AGC ON), 0.005 Lux @ (F1.8, AGC ON), 0 Lux with IR
- H.265, H.265+, H.264, H.264+
- 140dB WDR
- 2.8 to 12 mm lens: IR range up to 50 m, 8 to 32 mm lens: IR range up to 100 m
- Alarm 2 inputs/2 outputs

- IP67, IK10
- 5 streams and up to 5 custom streams
- 6 behavior analyses, 2 exception detections, and face detection
- 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.



### 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: 0.002 Lux @ (F1.2, AGC ON), 0.005 Lux @ (F1.8, AGC ON), 0 Lux with IR
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
Day & Night	IR cut filter
WDR	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 and 8 to 32 mm optional
Aperture	2.8 to 12 mm: F1.2 to 2.5
	8 to 32 mm: F1.8, Constant F1.8 throughout the zoom range
Focus	Auto, semi auto, manual
Auto-iris	P-iris
	2.8 to 12 mm, horizontal FOV 109.2° to 38.9°, vertical FOV 56.2° to 21.9°, diagonal FOV
FOV	134.5° to 45°
	8 to 32 mm, horizontal FOV 37.7° to 15.2°, vertical FOV 21° to 8.6°, diagonal FOV 43.3°
	to 17.24°
Lens Mount	Integrated
Illuminator	
IR Range	2.8 to 12 mm: up to 50 m; 8 to 32 mm: up to 100 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)
	60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480) Main stream: H.265+/H.265/H.264+/H.264
Video Compression	Sub stream/third stream/fourth stream/fifth stream/custom stream:
	H.265/H.264/MJPEG



H 264	Baseline Profile/Main Profile/High Profile
H.264+	Main stream support
Н.265 Туре	Main Profile
H.265+	Main stream support
Video Bit Rate	32 Kbps to 16 Mbps
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Smart Feature-Set	
	Line crossing detection, up to 4 lines configurable
	Intrusion detection, up to 4 regions configurable
	Region entrance detection, up to 4 regions configurable
Constant Frank	Region exiting detection, up to 4 regions configurable
Smart Event	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
Dasic Eveni	address conflict, illegal login, HDD full, HDD error)
Statistics	Counting
	Trigger recording: memory card, network storage, pre-record and post-record
Linkage Method	Trigger captured pictures uploading: FTP, SFTP, HTTP, NAS, Email
	Trigger notification: HTTP, ISAPI, alarm output, Email
Region of Interest	Main stream/sub stream/third stream/fourth stream/fifth stream: 4 fixed regions
Region of Interest	dynamic face tracking for each stream
Image	
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, distortion correction
	Rotate mode, saturation, brightness, contrast, sharpness, AGC, and white balance
Image Setting	adjustable by client software or web browser
Target Cropping	Yes
Day/Night Switch	Day/Night/Auto/Schedule/Triggered by Alarm In
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
SNR	≥52dB
Network	
	microSD/SDHC/SDXC card (256 GB), local storage and NAS (NFS,SMB/CIFS), ANR
Network Storage	Together with high-end Hikvision memory card, memory card encryption and heal
	detection are supported.
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE,
	NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
API	ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, Ehome
Smooth Streaming	Yes
	Password protection, complicated password, HTTPS encryption, 802.1X authentica
Security	(EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest
-1	authentication for HTTP/HTTPS, WSSE and digest authentication for ONVIF, RTP/R
	over HTTPS, control timeout settings, security audit log, TLS 1.2, TLS1.0, TLS1.1



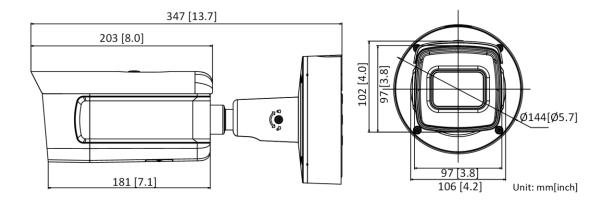
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users. 3 user levels: administrator, operator and user
Client	iVMS-4200, Hik-Connect, Hik-Central
	Plug-in required live view: IE8+
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+
	Local service: Chrome57.0+, Firefox52.0+
Interface	
Communication Interface	1 RJ45 10M/100M/1000M Ethernet port
Alarm	2 inputs, 2 outputs (max. 24 VDC/VAC, 1A)
Video Out	1Vp-p composite output (75 $\Omega$ /CVBS), only for adjustment
Interface Style	Connector panel
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
General	
Firmware Version	5.6.0
	32 languages
	English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak,
Web Client Language	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, privacy masks,
	flash log, password reset via e-mail, pixel counter, HTTP listening
Reset	Reset via reset button on camera body, web browser and client software
Startup and Operating	-30 °C to 65 °C (-22 °F to 149 °F), -H: -40 °C to 65 °C (-40 °F to 149 °F)
Conditions	Humidity 95% or less (non-condensing)
Storage Conditions	-30 °C to 65 °C (-22 °F to 149 °F)
	Humidity 95% or less (non-condensing)
Power Supply	12 VDC $\pm$ 20%, two-core terminal block; reverse polarity protection, PoE (802.3at, class
	4)
	-IZS: 12 VDC, 1.08 A, max. 13 W; PoE (802.3at, 42.5 V to 57 V), 0.31 A to 0.23 A, max.
Power Consumption and Current	13 W
·	-IZHS: 12 VDC, 1.13 A, max. 13.5 W; PoE (802.3at, 42.5 V to 57 V), 0.42 A to 0.32 A,
	max. 18 W
Heater	-H: yes
Material	Metal
Dimensions	Camera: Φ144 × 347 mm (Φ5.7" × 13.7")
	With package: 405 × 190 × 180 mm (15.9" × 7.5" × 7.1")
Weight	Camera: approx. 2.45 kg (5.40 lb.)
	With package: approx. 2.7 kg (5.95 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; AS/NZS CISPR 32: 2015; ICES-003: Issue 6, 2016; KN 32:
	2015, KN 35: 2015



Safety	UL 60950-1, IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, EN 60950-1:2005 + Am 1:2009 + Am 2:2013, IS 13252(Part 1):2010+A1:2013+A2:2015
Chemistry	2011/65/EU, 2012/19/EU, Regulation (EC) No 1907/2006
Protection	Ingress protection: IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)

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

### Dimension



#### Accessory



DS-1475ZJ-SUS Vertical Pole Mount



DS-1476ZJ-SUS Corner Mount

#### **ORDERING INFORMATION**

114-029B

Hikvision DS-2CD5A46G0-IZS Bullet Darkfighter / Lightfighter 4MP 8-32mm Motorized

