HIKVISION

DS-2CD5046G0-(AP)
4 MP Smart Box Network Camera

DarkFighter

- 1/1.8" Progressive Scan CMOS
- Color: 0.002 Lux @ (F1.2, AGC ON)
- 2560 × 1440 @ 30fps
- MJPEG up to 1920 × 1080 @ 30fps
- Auto-iris and P-iris optional
- Auto back focus (ABF) optional
- H.265, H.265+, H.264, H.264+
- 140dB WDR
- Alarm 2 inputs/2 outputs, audio 1 input/1 output, 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)

- 5 streams and up to 5 custom streams
- 6 behavior analyses, 3 exception detection, 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.

Power Protection

The camera supports a wide voltage range of 10 VDC to 48 VDC. If the voltage instability occurs, the camera still works properly. The camera supports reverse polarity protection which can avoid the camera malfunction caused by false operation.

Specifications

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.002 Lux @ (F1.2, AGC ON); B/W: 0.0002 Lux @ (F1.2, AGC ON)
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
Day & Night	IR cut filter
WDR	140 dB

Lens	
Auto-Iris	DC drive. -P: P-iris supported
Lens Mount	CS mount

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.265/H.264+/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 support
H.265 Type	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

Audio	
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3
Audio Bit Rate	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/32Kbps(PCM)/ 8-320Kbps(MP3)
Environment Noise Filtering	Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz

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, audio exception 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	Trigger recording: memory card, network storage, pre-record and post-record 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 and dynamic face tracking for each stream

Image

Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS
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/Triggered by Alarm In
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format
SNR	≥52dB

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.
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
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 ONVIF, RTP/RTSP 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
Web Browser	Plug-in required live view: IE8+ Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+ Local service: Chrome57.0+，Firefox52.0+

Interface

Audio	1 input (line in), 1 output (line out), 2-core terminal block, mono sound
Communication Interface	1 RJ45 10M/100M/1000M Ethernet port 1 RS-485 interface (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Alarm	2 inputs, 2 outputs (max. 24 VDC/VAC, 1A max.)
Video Out	1Vp-p composite output (75 Ω/CVBS), only for adjustment
Power Output	12 VDC, max. 200 mA
Interface Style	Connector panel
On-board Storage	Built-in microSD/SDHC/SDXC slot, up to 256 GB

General

Firmware Version	V5.6.0
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, 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 Conditions	-30 °C to 60 °C (-22 °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 is recommended, 10 to 48 VDC; 24 VAC (-25%, + 24.9%); two-core terminal block; PoE (802.3af, class 3); Reverse polarity protection
Power Consumption and Current	With extra load: 12 VDC, 0.8 A, max. 10 W; 24 VAC, 0.7 A, max. 10 W; PoE (802.3af, 36 V to 57 V), 0.1 A to 0.3 A, max. 10 W, class 3 Without extra load: 12 VDC, 0.65 A, max. 7.6 W; 24 VAC, 0.55 A, max. 7.6 W; PoE (802.3af, 36 V to 57 V), 0.1 A to 0.3 A, max. 7.6 W, class 3
Material	Metal
Sustainability	PVC FREE
Dimensions	Camera: 142.6 × 69.8 × 68 mm (5.61" × 2.75" × 2.68") Package: 315 × 140 × 140 mm (12.4" × 5.51" × 5.51")
Weight	-AP: approx. 730 g (1.61 lb.), 1020 g (2.25 lb.) with package Non-AP: approx. 690 g (1.52 lb.), 975 g (2.15 lb.) with package

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

* 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-2CD5046G0, DS-2CD5046G0-AP

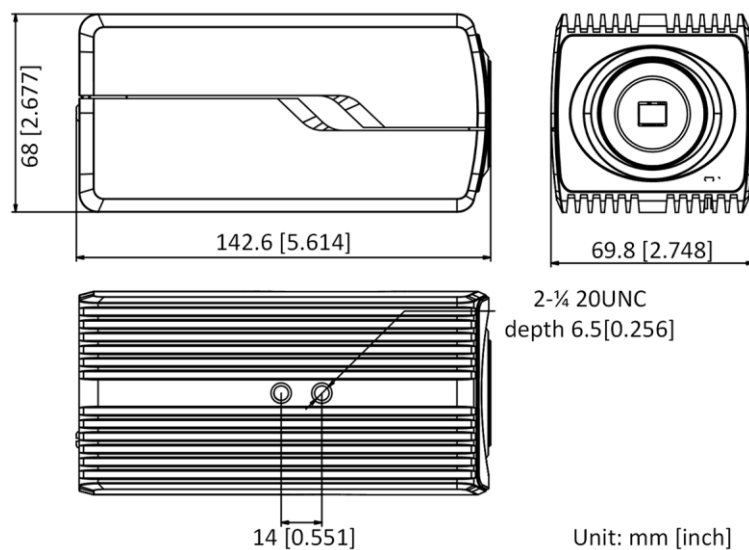** -AP: Auto back focus and P-iris are supported.*

▪ 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 protection	Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

Dimension

68 [2.677]

142.6 [5.614]

69.8 [2.748]

2-¼ 20UNC
depth 6.5[0.256]

14 [0.551]

Unit: mm [inch]

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Accessory

DS-1332HZ

Indoor Housing

DS-1292ZJ

Wall Mount

DS-1299ZJ

Pendant Mount

DS-1331HZ Series

Outdoor Housing

DS-1293ZJ

Wall Mount

DS-1214ZJ

Horizontal Pole Mount

DS-1269ZJ

Pendant Mount

DS-1233ZJ

Column Mount

DS-1331HZ-B

Outdoor Housing + DS-2202ZJ Integrated Mount

HV3816D-8MPIR

3.8 to 16 mm DC Iris

HV0415D-4MP

4 to 15 mm DC Iris

HV1140P-8MPIR

11 to 40 mm P-Iris

HV1140D-8MPIR

11 to 40 mm DC Iris

HV3816P-8MPIR

3.8 to 16 mm P-iris

HV0733D-6MP

7 to 33 mm DC Iris

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