## iDS-2CD7046G0/H-AP

4 MP Box Network Camera


Hikvision has been dedicated to develop products with security since established. Hikvision always follows security by design principle and has adopted many methods of security technologies into our product development lifecycle, including terminal security, data security, application security, network security, and privacy protection. In the meantime, the security technologies used by Hikvision are all in compliance with local applicable laws and safety regulations. These security measures could enhance product's cyber security defense capability and protect your devices as well as your data from malicious cyber attacks.

- Hikvsion Embedded Open Platform 2.0 for 3rd party integration
- Supports 2 Tops computing power, 150 MB system memory, 1024 MB smart RAM, and 2 GB eMMC storage for sharing resources
- High quality imaging with 4 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 140 dB WDR technology
- Efficient H. $265+$ compression technology to save bandwidth and storage
- 5 streams to meet a wide variety of applications
- Built-in microphone for real-time audio security


## - Specification

| Camera |  |
| :---: | :---: |
| Image Sensor | 1/1.8" Progressive Scan CMOS |
| Max. Resolution | $2688 \times 1520$ |
| Min. Illumination | Color: 0.0005 Lux @ (F1.2, AGC ON), B/W: 0.0001 Lux @ (F1.2, AGC ON), B/W: 0 Lux with IR |
| Shutter Time | 1 s to $1 / 100,000 \mathrm{~s}$ |
| Day \& Night | IR cut filter |
| Lens |  |
| Lens Mount | CS mount |
| HEOP |  |
| Open Resources | Memory: 150 MB , Smart RAM: 1024 MB, eMMC: 2 GB |
| Computing Power | 2 TOPS |
| Open Capability | HEOP 2.0 OpendevSDK |
| Deep Learning Structure | Caffe, PyTorch, TensorFlow |
| Programming Language | C, C++ |
| Video |  |
| Main Stream | $\begin{aligned} & 50 \mathrm{~Hz}: 25 \mathrm{fps}(2688 \times 1520,2560 \times 1440,1920 \times 1080,1280 \times 720) \\ & 60 \mathrm{~Hz}: 30 \mathrm{fps}(2688 \times 1520,2560 \times 1440,1920 \times 1080,1280 \times 720) \end{aligned}$ |
| Sub-Stream | $50 \mathrm{~Hz}: 25 \mathrm{fps}(704 \times 576,640 \times 480)$ <br> $60 \mathrm{~Hz}: 30 \mathrm{fps}(704 \times 480,640 \times 480)$ |
| Third Stream | $\begin{aligned} & 50 \mathrm{~Hz}: 25 \mathrm{fps}(1920 \times 1080,1280 \times 720,704 \times 576,640 \times 480) \\ & 60 \mathrm{~Hz}: 30 \mathrm{fps}(1920 \times 1080,1280 \times 720,704 \times 480,640 \times 480) \end{aligned}$ |
| Fourth Stream | $50 \mathrm{~Hz}: 25 \mathrm{fps}(704 \times 576,640 \times 480)$ <br> $60 \mathrm{~Hz}: 30 \mathrm{fps}(704 \times 480,640 \times 480)$ |
| Fifth Stream | $\begin{aligned} & 50 \mathrm{~Hz}: 25 \mathrm{fps}(704 \times 576,640 \times 480) \\ & 60 \mathrm{~Hz}: 30 \mathrm{fps}(704 \times 480,640 \times 480) \end{aligned}$ |
| Video Compression | Main stream: H.265+/H.265/H.264+/H.264, Sub-stream: H.265/H.264/MJPEG, <br> Third stream: H.265/H.264, <br> Fourth stream: H.265/H.264/MJPEG, <br> Fifth stream: H.265/H.264/MJPEG |
| 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. 264 and H. 265 encoding |
| Region of Interest (ROI) | 4 fixed regions for each stream |
| Target Cropping | Yes |
| Audio |  |
| Audio Type | Mono sound |
| Audio Compression | G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC |


| Audio Bit Rate | 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to $320 \mathrm{Kbps}(\mathrm{MP3}) / 16$ to 64 Kbps (AAC-LC) |
| :---: | :---: |
| Audio Sampling Rate | $8 \mathrm{kHz} / 16 \mathrm{kHz} / 32 \mathrm{kHz} / 44.1 \mathrm{kHz} / 48 \mathrm{kHz}$ |
| Environment Noise Filtering | Yes |
| Network |  |
| Protocols | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, SRTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, WebSocket, WebSockets |
| Simultaneous Live View | Up to 20 channels |
| API | Open Network Video Interface (Profile S, Profile G), ISAPI, SDK, ISUP |
| User/Host | Up to 32 users <br> 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 1.1, TLS 1.2, TLS 1.3 |
| Client | iVMS-4200, Hik-Connect |
| Network Storage | NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR), <br> Together with high-end Hikvision memory card, memory card encryption and health detection are supported. |
| Web Browser | Plug-in required live view: IE 10, IE 11, <br> Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+, Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+ |
| Image |  |
| Image Parameters Switch | Yes |
| Image Settings | Rotate mode, saturation, brightness, contrast, sharpness, AGC, white balance, adjustable by client software or web browser |
| Day/Night Switch | Day, Night, Auto, Schedule, Alarm Trigger |
| Wide Dynamic Range (WDR) | 140 dB |
| Image Enhancement | BLC, HLC, 3D DNR, Defog |
| Privacy Mask | 8 programmable polygon privacy masks, mask color or mosaic configurable |
| Picture Overlay | LOGO picture can be overlaid on video with $128 \times 12824$ bit bmp format. |
| Interface |  |
| Video Output | 1 Vp-p Composite Output ( $75 \Omega / \mathrm{CVBS}$ ) (Only for debugging) |
| Ethernet Interface | 1 RJ45 $10 \mathrm{M} / 100 \mathrm{M} / 1000 \mathrm{M}$ self-adaptive Ethernet port |
| On-Board Storage | Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB |
| Built-in Microphone | Yes, 1 built-in microphone |
| Audio | 1 input (line in), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp , input impedance: $4.7 \mathrm{~K} \Omega$, interface type: non-equilibrium, 1 output (line out), 3.5 mm connector, three-contact, max. output amplitude: 3.3 Vpp , output impedance: $100 \Omega$, interface type: non-equilibrium, mono sound |
| Alarm | 2 inputs, 2 outputs (max. $24 \mathrm{VDC} / 24 \mathrm{VAC}, 1$ A) |
| RS-485 | 1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive) |
| Reset Key | Yes |
| Power Output | 12 VDC, max. 100 mA |


| Event |  |
| :---: | :---: |
| Basic Event | Motion detection, video tampering alarm, network disconnected, IP address conflict, illegal login, HDD full, HDD error, abnormal restart, video quality diagnosis |
| Smart Event | 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 |
| General |  |
| Power | $12 \mathrm{VDC} \pm 20 \%, 0.7 \mathrm{~A}$, max. 8.4 W, three-core terminal block, reverse polarity protection, $24 \mathrm{VAC} \pm 20 \%, 0.59 \mathrm{~A}, \max .8 .0 \mathrm{~W},$ <br> PoE: IEEE 802.3af, Type 1, Class 3, 36 V to $57 \mathrm{~V}, 0.26$ A to 0.17 A , max. 9.2 W |
| Material | Aluminum alloy body |
| Dimension | $142.5 \mathrm{~mm} \times 69.8 \mathrm{~mm} \times 68 \mathrm{~mm}\left(5.61{ }^{\prime \prime} \times 2.75^{\prime \prime} \times 2.68{ }^{\prime \prime}\right)$ |
| Package Dimension | $315 \mathrm{~mm} \times 140 \mathrm{~mm} \times 140 \mathrm{~mm}\left(12.4{ }^{\prime \prime} \times 5.51^{\prime \prime} \times 5.51^{\prime \prime}\right)$ |
| Weight | Approx. 745 g (1.64 lb.) |
| With Package Weight | Approx. 1115 g ( 2.46 lb.$)$ |
| Storage Conditions | $-40^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.140^{\circ} \mathrm{F}\right)$. Humidity $95 \%$ or less (non-condensing) |
| Startup and Operating Conditions | $-30^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.140^{\circ} \mathrm{F}\right)$. 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 | Heartbeat, one-key reset, mirror, password protection, pixel counter, anti-banding |
| Approval |  |
| EMC | ```CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014, RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue 7, KC: KN32: 2015, KN35: }201``` |
| Safety | UL: UL 62368-1, <br> 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, <br> WEEE: 2012/19/EU, <br> Reach: Regulation (EC) No 1907/2006 |

## - Physical Interface


*Note: The interface varies depending on the model. Please refer to the actual product.

- Available Model
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## - Dimension



## - Accessory

- Optional

| HV3816P-8MPIR <br> Mega-pixel P-Iris Lens | HV1140P-8MPIR <br> Mega-pixel P-Iris Lens | DS-1269ZJ <br> Pendant Mount | DS-1331HZ-W Outdoor Housing | DS-2202ZJ <br> Wall Mount |
| :---: | :---: | :---: | :---: | :---: |
| $\left(\begin{array}{c} 1-9 \\ -4 \end{array}\right.$ |  |  |  | K |
| DS-1233ZJ <br> Pendant Mount | DS-1293ZJ <br> Wall mount | DS-1332HZ <br> Indoor Housing | HV0733D-6MP <br> Mega-pixel Auto-Iris Lens | HV1140D-8MPIR Mega-pixel Auto-Iris Lens |
|  | $\pi$ |  |  | 13 |
| HV0415D-MP <br> Mega-pixel Auto-Iris Lens | HV3816D-8MPIR <br> Mega-pixel Auto-Iris Lens | DS-1292ZJ <br> Wall mount | DS-1299ZJ <br> Pendant Mount | DS-1214ZJ <br> Horizontal pole mount |
|  |  |  | \% |  |

## Headquarters

No,555 Qianmo Road, Binjiang District,
Hangzhou 310051, China
$T+86-571-8807-5998$
www.hikvision.com
Follow us on social media to get the latest product and solution information

