

Specifications

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.007 Lux @ (F1.2, AGC ON), 0 Lux with IR
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
Day & Night	IR Cut Filter
Digital Noise Reduction	3D DNR
WDR	120 dB
Angle Adjustment	Bracket, pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°
Lens	
Focal length	2.8 to 12 mm
Aperture	2.8 to 12 mm: F1.2
Focus	Auto, semi auto, manual
FOV	2.8 to 12 mm, horizontal FOV 112.4° to 41°, vertical FOV 58° to 23°, diagonal FOV 137° to 47°
Lens Mount	Integrated
IR	
IR Range	2.8 to 12 mm: up to 50 m
Wavelength	850 nm
Compression Standard	
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
Audio Compression	No
Audio Bit Rate	No
Smart Feature-Set	
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle) Filtering out mistaken alarm caused by target types such as leaf, light, animal, and flag, etc.
Event Detection	Unattended baggage detection, object removal detection, scene change detection, defocus detection

Smart Feature-Set	
Face Detection and Capture	Face detection performance: detects up to 30 faces at the same time Detectable face position: supports swing left and right from -65° to 65°, tilt up and down from -45° to 45°
Statistics	Counting
Region of Interest	Main stream/sub stream/third stream/fourth stream/fifth stream: 4 fixed regions and dynamic face tracking for each stream
Image	
Max. Resolution	3840 × 2160
Main Stream	50Hz: 25fps (3840 × 2160, 3200 × 1800, 2560 × 1440, 1920 × 1080, 1280 × 720) 60Hz: 30fps (3840 × 2160, 3200 × 1800, 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) Up to 5 custom streams are supported
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, lens 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
SVC	H.264 and H.265 encoding
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
Network	
Network Storage	microSD/SDHC/SDXC card (256 GB), local storage and NAS (NFS,SMB/CIFS), ANR
Alarm Trigger	Motion detection, video tampering alarm, network disconnected, IP address conflict, illegal login, HDD full, HDD error
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
Security Measures	Password protection, HTTPS encryption, IEEE 802.1x port-based network access control, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for ONVIF
General Function	One-key reset, anti-flicker, five streams and custom stream, heartbeat, password protection, privacy mask, watermark, IP address filter
API	ONVIF (PROFILE S, PROFILE G), ISAPI, SDK
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users. 3 user levels: administrator, operator and user

Network	
Client	iVMS-4200, Hik-Connect, iVMS-5200, Hik-Central
Web Browser	IE8+, Mozilla Firefox 30.0+, Google Chrome 31.0+, Safari 8.0+ Plug-in free live view supported
Interface	
Audio	No
Communication Interface	1 RJ45 10M/100M/1000M Ethernet port
Alarm	2 inputs, 2 outputs (up to 12 VDC 1A or 10 VAC 500 mA)
Video Out	1Vp-p composite output (75 Ω/CVBS), 4CIF resolution
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
Reset Button	Yes
Audio	
Environment Noise Filtering	No
Audio Sampling Rate	No
General	
Firmware Version	5.5.60
Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F), -H: -40 °C to 60 °C (-40 °F to 140 °F) Humidity 95% or less (non-condensing)
Power Supply	12 VDC ± 20%, two-core terminal block; PoE (802.3at, class 4)
Power Consumption and Current	-IZS: 12 VDC, 1.2 A, 14 W; PoE (802.3at, 42.5 V to 57 V), 0.4 A to 0.3 A, class 4 -IZHS: 12 VDC, 1.4 A, 16.5 W; PoE (802.3at, 42.5 V to 57 V), 0.4 A to 0.3 A, class 4
Protection Level	IP67, IK10
Heater	-H: yes
Material	Aluminum alloy
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.)

* 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-2CD7A85G0-IZS(2.8–12 mm), DS-2CD7A85G0-IZHS(2.8–12 mm)

* -H: Heater supported.