

## Specifications

<b>Camera</b>	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.002 Lux @ (F1.2, AGC ON), 0.004 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
WDR	140 dB
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°
<b>Lens</b>	
Lens Type	Motorized lens , 2.8 to 12 mm, 8 to 32 mm
Aperture	2.8 to 12 mm @ F1.2 to F2.5 8 to 32 mm @ F1.6, Constant F1.6 throughout the zoom range
Focus	Auto, semi-auto, manual
FOV	2.8 to 12 mm, horizontal FOV 103.3° to 38.6°, vertical FOV 54.2° to 21.9°, diagonal FOV 124.2° to 44.3° 8 to 32 mm, horizontal FOV 42.5° to 13.4°, vertical FOV 23.4° to 7.7°, diagonal FOV 49° to 15.3°
Lens Mount	Integrated
<b>Illuminator</b>	
IR Range	2.8 to 12 mm lens: up to 50 m 8 to 32 mm lens: up to 100 m
Wavelength	850 nm
<b>Video</b>	
Max. Resolution	1920 × 1080
Video Stream	5 defined streams and up to 5 custom stream
Main Stream	50Hz: 50fps (1920 × 1080, 1280 × 960, 1280 × 720) 60Hz: 60fps (1920 × 1080, 1280 × 960, 1280 × 720)
Sub Stream	50Hz: 25fps (704 × 576, 640 × 480) 60Hz: 30fps (704 × 480, 640 × 480)
Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 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 × 576, 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 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

<b>Audio</b>	
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM
Audio Bit Rate	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/32Kbps(PCM)
Environment Filtering	Noise Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
<b>Smart Feature-set</b>	
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	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture
Region of Interest	4 fixed regions for main stream, sub stream, third stream, fourth stream, and fifth stream, and dynamic face tracking
<b>Image</b>	
Image Enhancement	BLC, HLC, Defog, EIS, Distortion Correction, 3D DNR
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	Auto/Schedule/Day/Night/Triggered by Alarm In
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
<b>Network</b>	
Network Storage	microSD/SDHC/SDXC card (256 G), 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, 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), ISAPI, SDK
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
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users, 3 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 Firefox 30.0-51, Safari8.0-11 Plug-in free live view: Chrome 45+, Mozilla Firefox 52+
<b>Interface</b>	
Communication Interface	1 RJ45 10M/100M/1000M self-adaptive Ethernet port, RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Audio	1 input (line in), 1 output (line out), 3.5 mm connector, mono

Alarm	2 inputs, 2 outputs (24 VAC/VDC, 1 A max.)
Video Output	1Vp-p composite output (75 Ω/CVBS), only for adjustment
Power Output	12 VDC, max. 200mA
Interface Style	Pigtail style interface
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
<b>General</b>	
Firmware Version	5.5.90
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, regions of privacy mask, flash log, password reset via e-mail, pixel counter
Reset	Reset via reset button on camera body, web browser and client software
Startup and Operating Conditions	-30 °C to 65 °C (-22 °F to 149 °F), -H: -40 °C to 65 °C (-40 °F to 149 °F) 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 ± 20%, three-core terminal block, reverse polarity protection PoE (802.3at, class 4)
Power Consumption and Current	-IZS: With extra load: 12 VDC, 1.28 A, max. 15.4 W; PoE (802.3at, 42.5 V to 57 V), 0.36 A to 0.27 A, max. 15.4 W Without extra load: 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. 13 W -IZHS: With extra load: 12 VDC, 1.33 A, max. 15.9 W; PoE (802.3at, 42.5 V to 57 V), 0.50 A to 0.37 A, max. 21.2 W Without extra load: 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 “with extra load” means that an extra device is connected to and powered by the camera.
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: 1.85 kg (4.07 lb.) With package: 2.95 kg (6.50 lb.)
<b>Approval</b>	
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)

Note: 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