HIKVISION®

Dark Fighter

140dB WDR | | **3D DNR** | **H.265+** | **P Iris** | **ABC123**

DeepinView series

- 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

- License Plate Recognition

- Efficient H.265+ compression technology to save bandwidth and storage

- Advanced streaming technology that enables smooth live view and data self-correcting in poor network

- 5 streams and up to 5 custom streams to meet a wide variety of applications

- Water and dust resistant (IP67) and vandal proof (IK10)

▪ **Function**

Road Traffic and Vehicle Detection

With embedded deep learning based license plate capture and recognition algorithms, the camera alone can achieve plate capture and recognition. The algorithm enjoys the high recognition accuracy of common plates and complex-structured plates, which is a great step forward comparing to traditional algorithms. Blacklist and whitelist are available for plate categorization and separate alarm triggering.

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.

▪ **Specification**

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON); B/W: 0.0003 Lux @ (F1.2, AGC ON)
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
P/N	P/N
Wide Dynamic Range	140 dB
Day & Night	IR cut filter
Power-off Memory	Yes
Lens	
Focus	Auto, semi-auto, manual
Lens Type & FOV	2.8 to 12 mm, horizontal FOV: 114.5° to 41.8°, vertical FOV: 59.3° to 23.6°, diagonal FOV: 141.1° to 48° 8 to 32 mm, horizontal FOV: 42.5° to 15.1°, vertical FOV: 23.3° to 8.64°, diagonal FOV: 49.6° to 17.3°
Aperture	2.8 to 12 mm: F1.2 to 2.5 8 to 32 mm: F1.7 to F1.73
Lens Mount	Integrated
Blue Glass Module	Blue glass module to reduce ghost phenomenon.
P-Iris	Yes
Illuminator	
IR Range	2.8 to 12 mm: 30 m 8 to 32 mm: 80 m
Wavelength	850 nm
Smart Supplement Light	Yes
Video	
Max. Resolution	2680 ×1520
Main Stream	50Hz: 25fps (2680 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60Hz: 30fps (2680 × 1520, 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
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
H.264+	Main Stream supports
H.265+	Main Stream supports
Bit Rate Control	CBR/VBR
Stream Type	Main stream/sub-stream/third stream/fourth stream/fifth stream/custom stream

Scalable Video Coding (SVC)	H.265 and H.264 support
Region of Interest (ROI)	4 fixed regions for each stream

Audio

Environment Noise Filtering	Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
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)
Audio Type	Mono sound

Network

Simultaneous Live View	Up to 20 channels
API	ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP,UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
Smooth Streaming	Yes
User/Host	Up to 32 users. 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 ONVIF, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2
Network Storage	microSD/SDHC/SDXC card (256 GB) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR) Together with high-end Hikvision memory card, memory card encryption and health detection are supported.
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: Chrome 41.0+, Firefox 30.0+

Image

Smart IR	The IR LEDs on camera should support Smart IR function to automatically adjust power to avoid image overexposure.
Day/Night Switch	Day, Night, Auto, Schedule, Triggered by Alarm In, Triggered by Video
Target Cropping	Yes
Distortion Correction Distortion	Yes
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, Distortion Correction
Image Parameters Switch	Yes
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser
SNR	≥52 dB

Interface

Alarm	2 input, 2 outputs (max. 24 VDC, 1 A)
Audio	With -Y: 1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium; 1 output (line out), 3.5 mm connector, max. output amplitude: 3.3 vpp, output impedance: 100 Ω, interface type: non-equilibrium, mono sound
RS-485	With -Y: 1 RS-485(half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Video Output	1 Vp-p Composite Output(75Ω/CVBS)(For debugging only)
On-board Storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB

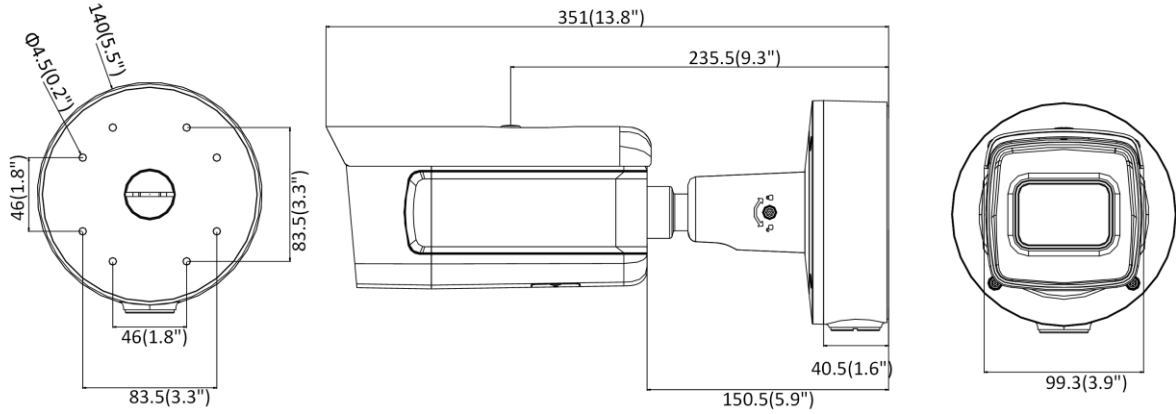|	
Hardware Reset	Yes
Communication Interface	1 RJ45 10M/100M/1000M self-adaptive Ethernet port
Power Output	With -Y: 12 VDC, max. 200 mA (supported by all power supply types)
Smart Feature-Set	
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error), black/white list of license plate
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 Scene change detection, audio exception detection
Counting	Yes
Intelligent (Deep Learning Algorithm)	
Premier 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.
Road Traffic and Vehicle Detection	Accuracy (under recommended installation and lighting conditions) Capture rate > 98% Vehicle moving direction recognition accuracy > 96% Mistaken capture rate < 2% (entrance/exit), < 5% (checkpoint) Blacklist and whitelist: up to 10000 records Captures vehicle that has no license plate Support license plate recognition of motorcycles (only in checkpoint scenario) Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.)
General	
Linkage Method	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture 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
Online Upgrade	Yes
Dual Backup	Yes
Firmware Version	V5.5.121
Web Client 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	Anti- flicker, 5 streams and up to 5 custom streams, heartbeat, mirror, privacy masks, flash log, password reset via e-mail, pixel counter
Software Reset	Yes
Storage Conditions	-40 °C to 60 °C (-40 °F to 140 °F).Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-40 °C to 60 °C (-40 °F to 140 °F).Humidity 95% or less (non-condensing)
Power Supply	12 VDC ± 20%, three-core terminal block, reverse polarity protection; PoE: 802.3at, Type 2 Class 4

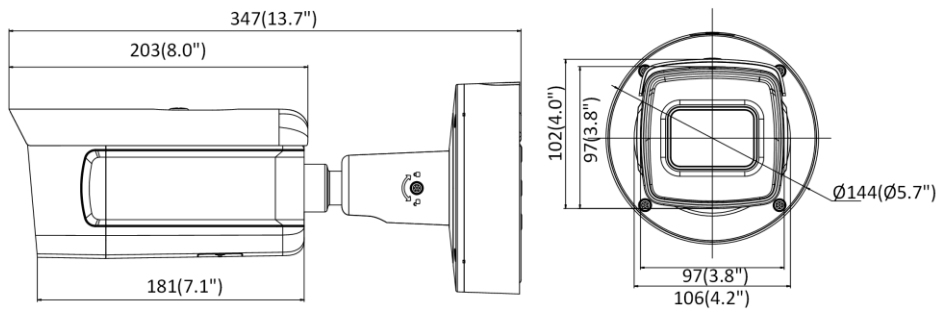| Power Consumption and Current	12 VDC, 1.33 A, max. 16.0 W PoE: (802.3at, 42.5V-57V), 0.43 A to 0.31 A, max. 18.0 W
Power Interface	Three-core terminal block
Material	Aluminum alloy body
Screw Material	Mild steel
Camera Dimension	Without -Y: Ø144 × 347 mm (Ø5.7" × 13.7") With -Y: Ø140 × 351 mm (Ø5.5" × 13.8")
Package Dimension	405 × 190 × 180 mm (15.9" × 7.5" × 7.1")
Camera Weight	1920 g (4.2 lb.)
With Package Weight	3060 g (6.7 lb.)
Metadata	
Metadata	Metadata of intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, object removal are supported.
Approval	
Class	Class B
EMC	FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 6, 2016); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013); BIS (IS 13252(Part 1):2010+A1:2013+A2:2015); LOA (IEC/EN 60950-1)
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Protection	Ingress protection: IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)
Anti-Corrosion Protection	With -Y: NEMA 4X(NEMA 250-2014)
Other	With -Y: PVC FREE

Available Model

iDS-2CD7A46G0/P-IZHS (2.8 to 12 mm), iDS-2CD7A46G0/P-IZHS (8 to 32 mm), iDS-2CD7A46G0/P-IZHSY (2.8 to 12 mm), iDS-2CD7A46G0/P-IZHSY (8 to 32 mm)

▪ Dimension

-Y model:

140(5.5")
Ø4.5(0.2")
46(1.8")
83.5(3.3")
46(1.8")
83.5(3.3")

351(13.8")
235.5(9.3")
40.5(1.6")
150.5(5.9")

99.3(3.9")

Without -Y model:

347(13.7")
203(8.0")
181(7.1")

102(4.0")
97(3.8")
Ø144(Ø5.7")
97(3.8")
106(4.2")

Unit: mm(inch)

Accessory

–Y model:

DS-1476ZJ-Y
Corner Mount

DS-1475ZJ-Y
Vertical Pole Mount

Without –Y model:

DS-1475ZJ-SUS
Vertical Pole Mount

DS-1476ZJ-SUS
Corner Mount

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