### **4 MP IR Varifocal Bullet Network Camera**

















# - DeepinView

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

#### Function

**Face Recognition** 

With embedded deep learning based algorithms, the camera is able to give the best shot of a target face through detecting, tracking, capturing, grading and selecting. The camera captures the face and outputs the features, such as gender, age, and expression. The camera uses face exposure function to dynamically adjust face area exposure of captures and ensures high face picture quality.

**Perimeter Protection** 

With embedded deep learning based target detection and classification algorithms, the camera carries out the duty of perimeter protection, monitoring the actions of line crossing, intrusion, region entrance, and region exiting. The algorithms greatly filter out the mistaken alarm caused by the interference of leafs, lights, animal, flag, etc.

Multi-Target-Type Recognition

With the embedded deep learning algorithms, the camera detects and captures the face, human body, vehicle in the specified region and outputs the features, such as gender, age, top color, and vehicle type.

# Specification

Camera				
Image Sensor	1/1.8" Progressive Scan CMOS			
Max. Resolution				
Min. Illumination	2560 × 1440			
Shutter Time	Color: 0.0005 Lux @ (F1.2, AGC ON); B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR			
Shutter Time	1 s to 1/100,000 s			
Day & Night	IR cut filter			
Lawa	Blue glass module to reduce ghost phenomenon			
Lens	2.0 to 12 man having that FOV: 114 F° to 41.0° continue FOV: FO 2° to 22.0° diagonal			
Focal Length & 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°			
Focus	Auto, semi-auto, manual			
Iris Type	P-iris			
Aperture	2.8 to 12 mm: F1.2 to F2.5			
	8 to 32 mm: F1.7 to F1.73			
Illuminator				
Supplement Light Type	IR			
Supplement Light Range	2.8 to 12 mm: 50 m			
	8 to 32 mm: 100 m			
Smart Supplement Light	Yes			
IR Wavelength	850 nm			
Video				
Main Stream	50 Hz: 50 fps (2560 × 1440, 1920 × 1080, 1280× 720)			
	60 Hz: 60 fps (2560 × 1440, 1920 × 1080, 1280× 720)			
Sub-Stream	50 Hz: 25 fps (704 × 480, 640 × 480)			
Sab Stream	60 Hz: 30 fps (704 × 480, 640 × 480)			
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)			
Tima Stream	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)			
Fourth Stream	50 Hz: 25 fps (704 × 480, 640 × 480)			
Tourin Stream	60 Hz: 30 fps (704 × 480, 640 × 480)			
Fifth Stream	50 Hz: 25 fps (704 × 480, 640 × 480)			
Titti Stream	60 Hz: 30 fps (704 × 480, 640 × 480)			
Video Compression	H.265+/H.265/H.264+/H.264/MJPEG			
Video Bit Rate	32 Kbps to 8 Mbps			
H.264 Type	Baseline Profile/Main Profile/High Profile			
H.265 Type	Baseline Profile/Main Profile/High Profile			
Bit Rate Control	CBR/VBR			
Scalable Video Coding (SVC)	H.264 and H.265 encoding			
Design of letters 1 (DOI)	4 fixed regions for main stream, sub-stream, third stream, fourth stream and fifth			
Region of Interest (ROI)	stream			
Target Cropping	Yes			

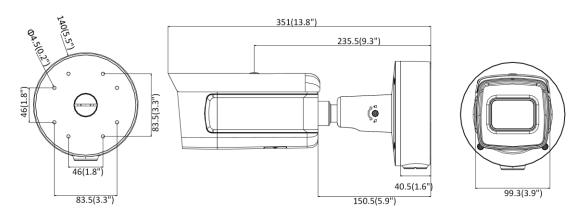
Audio					
Audio Rit Pate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/16 to 64				
Audio Bit Rate	Kbps (AAC) /8 to 320 Kbps (MP3)				
Audio Type	Mono sound				
Environment Noise Filtering	Yes				
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHZ/48 kHz				
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3				
Network					
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				
Simultaneous Live View	Up to 20 channels				
API	Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP				
User/Host	Up to 32 users				
Osei/Host	3 user levels: administrator, operator, and user				
	Password protection, complicated password, HTTPS encryption, 802.1X authentication				
	(EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest				
Security	authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network				
	Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log,				
	TLS 1.2				
	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)				
Network Storage	Together with high-end Hikvision memory card, memory card encryption and health				
	detection are supported.				
Client	iVMS-4200, Hik-Connect				
	Plug-in required live view: IE9+, Chrome 41.0 to 44, Firefox 30.0 to 51, Safari 8.0 to 11				
Web Browser	Plug-in free live view: Chrome 45.0+, Firefox 52.0+				
	Not recommended: Safari 11+, Edge				
Image					
Image Parameters Switch	Yes				
Image Settings	Saturation, brightness, contrast, sharpness, white balance, and AGC 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, Defog, 3D DNR				
SNR	≥ 52 dB				
Privacy Mask	8 programmable polygon privacy masks, mask color or mosaic configurable				
Image Stabilization	EIS				
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format				
Interface					
Video Output	1 Vp-p Composite Output (75 $\Omega$ /CVBS) (Only for debugging)				
Ethernet Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port				
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB				
Audio	With -Y: 1 input (line in), 1 output (line out), 3.5 mm connector				
Alarm	2 input, 2 outputs (max. 24 VDC, 1 A)				
RS-485	With -Y: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)				
Reset Key	Yes				

Power Output	With -Y: 12 VDC, max. 100 mA		
Event			
	Motion detection, video tampering alarm, exception (network disconnected, IP		
Basic Event	address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality		
	diagnosis, vibration detection		
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting		
	detection, audio exception detection, scene change detection, defocus detection		
Calana	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alar		
Linkage	output, trigger recording, trigger capture		
Deep Learning Function			
	Supports simultaneous detection and capture of human body, face and vehicle		
Multi-target-type Detection	Gets 7 face features, 13 human body features and 2 vehicle features		
	1. Detects up to 60 faces simultaneously		
Face Capture	2. Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°		
	3. Uploads face with background and closed-up face pictures		
	Up to 10 face libraries. Up to 150,000 faces for each library. 150,000 faces in total.		
Face Comparison	Supports face library encryption		
	Line crossing, intrusion, region entrance, region exiting		
Perimeter Protection	Support alarm triggering by specified target types (human and vehicle)		
General			
	12 VDC ± 20%, 1.19 A, max. 14.28 W, three-core terminal block		
Power	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V), 0.396 A to 0. 295A, max. 16.8 W		
Material	Aluminum alloy body		
	Without -Y: Ø144 × 347 mm (Ø5.7" × 13.7")		
Dimension	With -Y: Ø140 × 351 mm (Ø5.5" × 13.8")		
Package Dimension	405 × 190 × 180 mm (15.9" × 7.5" × 7.1")		
Weight	Approx. 1950 g (4.2 lb.)		
With Package Weight	Approx. 3070 g (6.7 lb.)		
Storage Conditions	-30 °C to 60 °C (-22 °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)		
	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italia		
	Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedis		
Language	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chines		
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian		
	Heartbeat, mirror, password protection, watermark, privacy mask, IP address filter,		
General Function	one-key reset, five streams		
Approval			
	FCC (47 CFR Part 15, Subpart B);		
	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN		
EMC	50130-4: 2011+A1: 2014);		
	RCM (AS/NZS CISPR 32: 2015);		
	IC (ICES-003: Issue 7);		
	KC (KN 32: 2015, KN 35: 2015)		

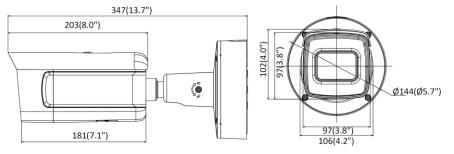
7	UL (UL 62368-1);		
Safety	CB (IEC 62368-1:2014+A11);		
	CE-LVD (EN 62368-1:2014/A11:2017);		
	BIS (IS 13252(Part 1):2010/ IEC 60950-1 : 2005);		
	LOA (IEC/EN 60950-1)		
Environment	CE-RoHS (2011/65/EU);		
	WEEE (2012/19/EU);		
	Reach (Regulation (EC) No 1907/2006)		
Protection	IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)		
Anti-Corrosion Protection	With -Y: NEMA 4X(NEMA 250-2018)		
Automotive and Railway	EN50121-4		
Other	PVC FREE		

### Dimension

-Y model:



Without -Y model:



Unit: mm(inch)

# Accessory

## Optional

Vertical Pole Mount	Vertical Pole Mount	Corner Mount	Corner Mount
MAN			