## 4 MP 25 × IR Varifocal Bullet Network Camera



# - DeepinView

- High quality imaging with 4 MP resolution
- 25 × optical zoom captures details in remote area
- Clear imaging against strong back light due to 140 dB WDR technology
- Efficient H.265+ compression technology to save bandwidth and storage
- Built-in heater on the front viewing window to ensure clear image under snowy weather
- Built-in gyroscope to ensure stable image output
- 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	1/2.5" Progressive Scan CMOS				
Max. Resolution	2688 × 1520				
Min. Illumination	Color: 0.009 Lux @ (F1.6, AGC ON), B/W: 0.0018 Lux @ (F1.6, AGC ON), 0 Lux with IR				
Shutter Time	1 s to 1/30,000 s				
Day & Night	IR cut filter				
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°				
Lens					
Focal Length & FOV	4.7 to 118 mm, horizontal FOV 58° to 2.8°, vertical FOV 32.3° to 1.6°, diagonal FOV 63° to 3°				
Focus	Auto, semi-auto, manual				
Iris Type	P-iris				
Aperture	4.7 to 118 mm: F1.6 to F3.8				
DORI					
DORI	Wide: D: 106 m, O: 42.1 m, R: 21.2 m, I: 10.6 m Tele: D: 2200 m, O: 873 m, R: 440 m, I: 220 m				
Illuminator					
Supplement Light Type	IR				
Supplement Light Range	Up to 200 m				
Smart Supplement Light	Yes				
IR Wavelength	850 nm				
Video					
Main Stream	50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 50 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 fps (2560 × 1440, 1920 × 1080, 1280 × 720)				
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)				
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)				
Fourth Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)				
Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)				
Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream/Fourth stream/Fifth stream: H.265/H.264/MJPEG Third stream: H.265/H.264				
Video Bit Rate	32 Kbps to 8 Mbps				
Н.264 Туре	Baseline Profile/Main Profile/High Profile				
Н.265 Туре	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				
e-PTZ	Supports Patrol and Auto-tracking settings				
Audio					
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3				
Audio Type	Mono sound				
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHZ/48 kHz				
Environment Noise Filtering	Yes				
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/16 to 64 Kbps (AAC)/8 to 320 Kbps (MP3)				
Network					
	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP,				
Protocols	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				
11	Up to 32 users				
User/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, Hik-Central				
	Plug-in required live view: IE10+				
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 12+				
	Local service: Chrome 57.0+, Firefox 52.0+				
Image					
Image Parameters Switch	Yes				
Image Settings	Saturation, brightness, contrast, sharpness, white balance, and AGC adjustable by				
inage Settings	client software or web browser				
Day/Night Switch	Day, Night, Auto, Schedule				
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				
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format				
Image Stabilization	EIS (Built-in gyroscope to improve EIS performance)				
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				

	1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 vpp, input impedance:					
Audio	4.7 K $\Omega$ , interface type: non-equilibrium;					
	1 output (line out), 3.5 mm connector, max. output amplitude: 3.3 vpp, output					
	impedance: 100 $\Omega$ , interface type: non-equilibrium					
Alarm	2 inputs, 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 (support alarm triggering by specified target types (human and					
	vehicle)), video tampering alarm, exception (network disconnected, IP address conflict,					
Basic Event	illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration					
	detection					
	Line crossing detection, intrusion detection, region entrance, region exiting (support					
Smart Event	alarm triggering by specified target types (human and vehicle))					
	Scene change detection, audio exception detection, defocus detection					
	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm					
Linkage	output, trigger recording, trigger capture					
Deep Learning Function						
	Detects up to 60 taregets simultaneously					
Multi-target-type Detection	Supports simultaneous detection and capture of human body, face and vehicle					
	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					
Face Comparison	Up to 10 face libraries. Up to 30,000 faces for each library. 150,000 faces in total.					
	Supports face library encryption					
General						
	-IZHSY:					
	12 VDC ± 20%, 1.73 A, max. 20.7 W, three-core terminal block					
	24 VAC ± 20%, 1.31 A, max. 19.9 W, three-core terminal block					
	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.46 A to 0.35 A, max. 19.5 W					
	-IZHS:					
	12 VDC ± 20%, 1.62 A, max. 19.4 W, two-core terminal block					
	24 VAC ± 20%, 1.21 A, max. 18.7 W, two-core terminal block					
Power	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.43 A to 0.32 A, max. 18.2 W					
	-IZSY:					
	12 VDC ± 20%, 1.13 A, max. 13.48 W, three-core terminal block					
	24 VAC ± 20%, 0.89 A, max. 12.14 W, three-core terminal block					
	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.22 A to 0.29 A, max. 12.29 W					
	-IZS:					
	12 VDC ± 20%, 1.02 A, max. 12.22 W, two-core terminal block					
	24 VAC $\pm$ 20%, 0.8 A, max. 11.49 W, two-core terminal block					
	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.20 A to 0.26 A, max. 10.50 W					
Material	Aluminum alloy body					

Dimension	With -Y: Ø140 mm × 378.4 mm (Ø5.5" × 14.9")				
Dimension	Without -Y: Ø144.1 mm × 375.2 mm (Ø5.7" × 14.8")				
Package Dimension	425 mm × 190 mm × 180 mm (16.7" × 7.5" × 7.1")				
Weight	With -Y: Approx. 2160 g (4.8 lb.)				
	Without -Y: Approx. 2130 g (4.7 lb.)				
With Package Weight	With -Y: Approx. 3310 g (7.3 lb.)				
	Without -Y: Approx. 3200 g (7.1 lb.)				
Storage Conditions	Without -H: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)				
Storage conditions	With -H: -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)				
Startup and Operating	-40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)				
Conditions					
	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian,				
Language	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	5 streams, heartbeat, mirror, privacy mask, flash log, password reset via email, pixel				
	counter				
Heater	Yes				
De-icing	Yes				
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)				
	UL (UL 62368-1);				
	CB (IEC 62368-1:2014+A11);				
Safety	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)				
Other	PVC FREE				

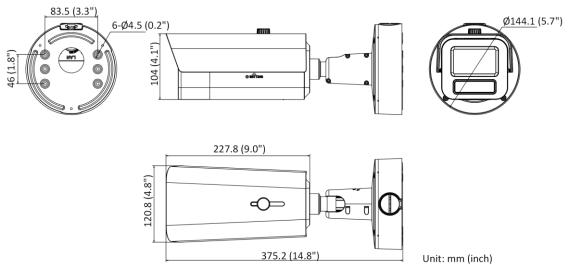
# Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

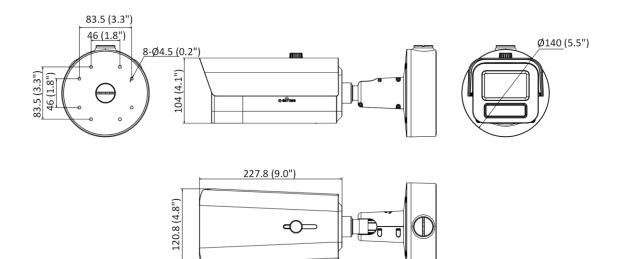
-Y model: This model has MODERATE PROTECTION. Without -Y model: This model has NO SPECIFIC PROTECTION.

Level	Description			
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.			
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.			
No specific protection	Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.			

# Dimension



Without -Y Model



378.4 (14.9") With -Y Model Unit: mm (inch)

# Accessory

## Optional

Vertical Pole Mount	Corner Mount	Corner Mount	Vertical Pole Mount	Vertical Pole Mount
IB				