

## PNC512-VBZ118 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					
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 3 user levels: administrator, operator, and user				
Security	<ul> <li>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 Open Network</li> <li>Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2</li> </ul>				
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR) Together with high-end memory card, memory card encryption and health detection are supported.				
Client	Guarding Vision				
Web Browser	Plug-in required live view: IE10+ 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 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 Ω/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	4.7 KΩ, interface type: non-equilibrium;				
40010	,,,				
	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	1 RS-485 (half duplex, Pelco-P, Pelco-D, self-adaptive)				
Reset Key	Yes				
Power Output	12 VDC, max. 100 mA				
Event					
Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception (network disconnected, IP address conflic 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				
inkene	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarr				
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				
	Up to 10 face libraries. Up to 30,000 faces for each library. 150,000 faces in total.				
Face Comparison	Supports face library encryption				
General					
Power	12 VDC ± 20%, 1.73 A, max. 20.7 W, three-core terminal block24 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				

Dimension	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	Approx. 2130 g (4.7 lb.)				
With Package Weight	Approx. 3200 g (7.1 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, Italian,				
	Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,				
Language	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				
	50130-4: 2011+A1: 2014);				
EMC	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				

## Available Model

PNC512-VBZ118 (4.7 to 118 mm)

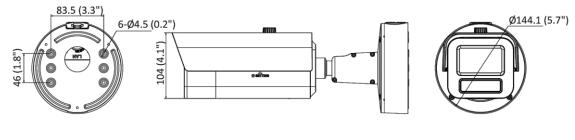
## Typical Application

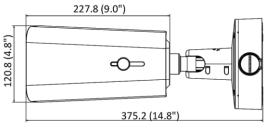
PerfectView products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

This model has NO SPECIFIC PROTECTION.

Level	Description		
Top-level protection	PerfectView 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, andmore.		
Moderate protection	PerfectView 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	PerfectView products at this level are equipped for use in areas where no specific		
	anti-corrosion protection is needed.		

## Dimension





Unit: mm (inch)

## Accessory

### Optional

P-476ZJ		P-475ZJ	
Corner Mount			Vertical Pole Mount