

**PNP522A-IR-42X**

**2 MP 42× Network IR Speed Dome**

**DarkFighter**



PerfectView PNP522A-IR-42X 2MP 42× Network IR Speed Dome adopts 1/1.8" progressive scan CMOS chip. With the 42× optical zoom lens, the camera offers more details over expansive areas.

This series of cameras can be widely used for wide ranges of high-definition, such as the rivers, forests, roads, railways, airports, ports, squares, parks, scenic spots, stations and large venues, etc.

- 1/1.8" Progressive Scan CMOS
- High quality imaging with 2 MP resolution
- Excellent low-light performance with DarkFighter technology
- 42× optical zoom and 16× digital zoom provide close up views over expansive areas
- Expansive night view with up to 400 m IR distance
- Water and dust resistant (IP67) and vandal resistant (IK10)
- Supports face capture to detect, capture, grade, and select faces in motion
- Supports road traffic to detect vehicles

## ▪ DORI

The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view.

It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
Distance (Tele)	3475.9 m (11403.9 ft.)	1379.3 m (4525.3 ft.)	695.2 m (2280.8 ft.)	347.6 m (1140.4 ft.)

## ▪ Specification

Camera	
Image Sensor	1/1.8" progressive scan CMOS
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON), B/W: 0.0005 Lux @ (F1.2, AGC ON), 0 Lux with IR
Shutter Speed	1/1 s to 1/30,000 s
Day & Night	IR cut filter
Zoom	42x optical, 16x digital
Max. Resolution	1920 × 1080
Lens	
Focus	Auto, semi-auto, manual, rapid focus
Focal Length	6.0 mm to 252 mm
Zoom Speed	Approx. 4.5 s (optical, wide-tele)
FOV	Horizontal field of view: 56.6° to 1.7° (wide-tele), Vertical field of view: 33.7° to 0.9° (wide-tele), Diagonal field of view: 63.4° to 1.9° (wide-tele)
Aperture	Max. F1.2
Illuminator	
Supplement Light Type	IR
Supplement Light Range	Up to 400 m
Smart Supplement Light	Yes
PTZ	
Movement Range (Pan)	360°
Movement Range (Tilt)	-20° to 90° (auto flip)
Pan Speed	Pan speed: configurable from 0.1° to 210°/s; preset speed: 280°/s
Tilt Speed	Tilt speed: configurable from 0.1° to 150°/s, preset speed 250°/s
Proportional Pan	Yes
Presets	300
Patrol Scan	8 patrols, up to 32 presets for each patrol
Pattern Scan	4 pattern scans, record time over 10 minutes for each scan
Power-off Memory	Yes
Park Action	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan
3D Positioning	Yes
PTZ Status Display	Yes
Preset Freezing	Yes

Scheduled Task	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output
<b>Video</b>	
Main Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288) 60 Hz: 30 fps (704 × 480, 640 × 480, 352 × 240)
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream: H.265/H.264/MJPEG Third stream: H.265/H.264/MJPEG
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main profile
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	8 fixed regions for each stream
<b>Audio</b>	
Audio Compression	G.711alaw, G.711ulaw, G.722.1, G.726, MP2L2, PCM
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32~192 Kbps (MP2L2)
<b>Network</b>	
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, UDP, IGMP, ICMP, Bonjour
API	ISUP, ISAPI, Open Network Video Interface (Profile S, Profile G, Profile T)
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users. 3 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, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.3, host authentication (MAC address)
Client	Guarding Vision
Web Browser	IE11, Chrome 57.0+, Firefox 52.0+, Safari 11+
<b>Image</b>	
Image Settings	Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by client software or web browser
Defog	Optical defog
Image Enhancement	BLC, HLC, 3D DNR
Wide Dynamic Range (WDR)	140 dB WDR
Image Stabilization	Yes. Built-in gyroscope to improve EIS performance.
Regional Exposure	Yes
Regional Focus	Yes
Privacy Mask	Up to 24 masks, polygon region, mosaic mask, mask color configurable
<b>Interface</b>	
Ethernet Interface	1 RJ45 10M/100M self-adaptive Ethernet port; Hi-PoE
On-board Storage	Built-in memory card slot, support MicroSD/MicroSDHC/MicroSDXC, up to 256 GB
Alarm	7 inputs, 2 outputs

Audio	1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: 1 K $\Omega$ $\pm$ 10%; 1 output (line out), line level, output impedance: 600 $\Omega$
Video Output	1.0V[p-p]/75 $\Omega$ , PAL, NTSC, BNC connector
RS-485	Pelco-P, Pelco-D, self-adaptive
<b>Event</b>	
Basic Event	Motion detection, video tampering alarm, alarm input and output, exception
Smart Event	Line crossing detection, region entrance detection, parking detection, unattended baggage detection, object removal detection, intrusion detection, region exiting detection, vandal-proof alarm, audio exception detection
Smart Tracking	Manual tracking, auto-tracking
Alarm Linkage	Alarm actions, such as Preset, Patrol Scan, Pattern Scan, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card/NAS, Send Email, etc.
<b>Deep Learning Function</b>	
Face Capture	Detects up to 30 faces simultaneously. Supports detecting, tracking, capturing, grading, selecting of face in motion, and output the best face picture of the face
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
<b>Road Traffic and Vehicle Detection</b>	
Road Traffic	Support vehicle detection (license plate number, vehicle model, and vehicle color recognition)
<b>General</b>	
General Function	Mirror, password protection, watermark, IP address filter
Power	24 VAC (Max. 60 W, including max. 18 W for IR and max. 6 W for heater), Hi-PoE (Max. 50 W, including max. 18 W for IR and max. 6 W for heater)
Operating Condition	Temperature: -40°C to 70°C (-40°F to 158°F), Humidity: $\leq$ 95%
Dimension	$\varnothing$ 266.6 mm $\times$ 410 mm ( $\varnothing$ 10.50" $\times$ 16.14")
Weight	Approx. 8 kg (17.64 lb.)
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
<b>Approval</b>	
EMC	FCC SDoC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC VoC (ICES-003: Issue 7); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 62368-1) 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

IP67 (IEC 60529-2013), IK10 (IEC 62262:2002), Lightning Protection, Surge Protection and Voltage Transient Protection,  $\pm 6\text{kV}$  Line to Gnd,  $\pm 3\text{kV}$  Line to Line

### ▪ Available Model

- PNP522A-IR-42X

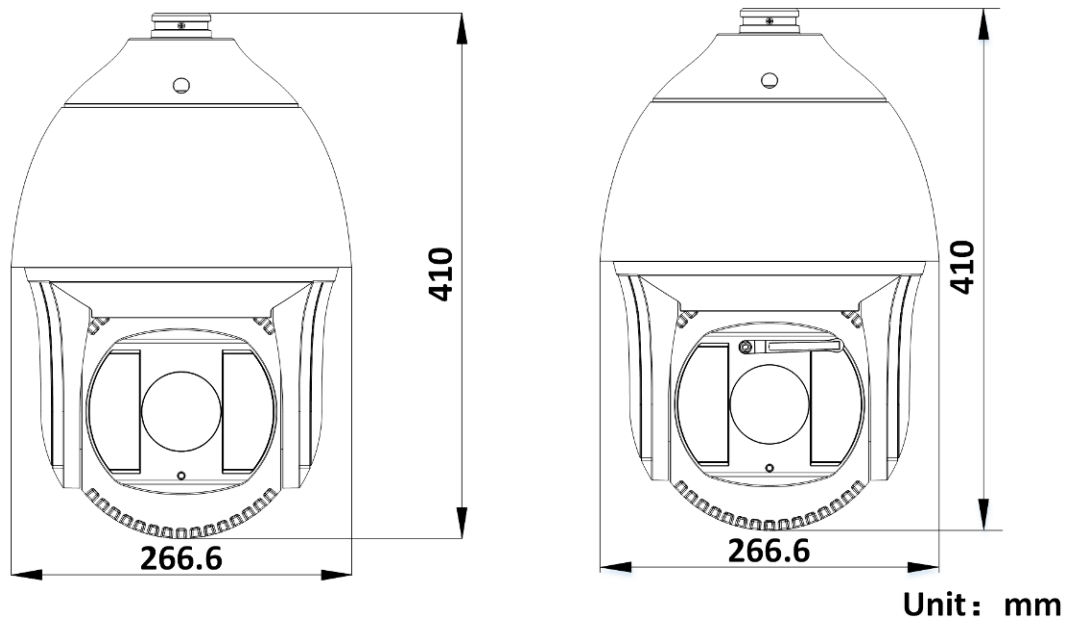
### ▪ Typical Application

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, and more.
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



- Accessory

- Optional

P-602ZJ-pole	P-60ZJ-box	P-60ZJ	P-602ZJ-BOX- POLE	P-662ZJ
				
P-60ZJ-BOX- CORNER	P-602ZJ-corner	P-660ZJ	P-602ZJ	P-661ZJ
				