



Network

## PNM-9322VQP

2MP/5MP x 5CH Multi-directional Camera



### Key Features

- Exchangeable 4ea x 2M / 5M lens modules
- 10M to 22M resolution (depend on the combination of lens modules)
- Max. 60fps@2M, Max. 30fps@5M (H.265 / H.264)
- WDR 150dB with 2M, 120dB with 5M lens module
- 2.4mm, 2.8mm, 3.6mm, 6mm, 12mm fixed lens (2M module)
- 3.7mm, 4.6mm, 7mm fixed lens (5M module)
- H.265, H.264, MJPEG codec, WiseStream II
- IP66, IK10, SD / SDHC / SDXC memory 5 slots
- 4.44~142.6mm(Optical 32x) lens, Day & Night (ICR)
- New install base design

### Compatible Devices



SBP-300PM



SBP-300KM



SBP-390WM2

# PNM-9322VQP

2MP/5MP x 5CH Multi-directional Camera



## Specifications

Video		4CH camera	4CH camera	4CH camera	4CH camera	PTZ
Imaging Device	Size	1/2.8"				
	Type	CMOS				
Resolution		3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	15fps/15fps(60Hz/50Hz)	15fps/15fps(60Hz/50Hz)	15fps/15fps(60Hz/50Hz)	15fps/15fps(60Hz/50Hz)	20fps/50fps(60Hz/50Hz)
	MJPEG	15fps(@8MP Max. 5fps)	15fps(@8MP Max. 5fps)	15fps(@8MP Max. 5fps)	15fps(@8MP Max. 5fps)	30fps
	Others	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.1	0.1	0.1	0.1	0.05
	BW(1/30sec, 30IRE)	0.01	0.01	0	0	0.005

## Lens

Focal Length (mm)		3.3~5.7	3.3~5.7	3.3~5.7	3.3~5.7mm	4.25~170
Zoom Ratio	Optical					40x
	Digital					32x
Max Aperture Ratio (F number)	Wide	F1.	F1.5	F1.5	F1.5	1.6
	Tele	F	F1.9	F1.9	F	4.95
Angular Field of View	Horizontal	109°(Wide)~56°(Tele)	109°(Wide)~56°(Tele)	109°(Wide)~56°(Tele)	109°(Wide)~56°(Tele)	65.66°~1.88°
	Vertical	55°(Wide)~31°(Tele)	55°(Wide)~31°(Tele)	55°(Wide)~31°(Tele)	55°(Wide)~31°(Tele)	39.40°~1.09°
	Diagonal	136°(Wide)~65°(Tele)	136°(Wide)~65°(Tele)	136°(Wide)~65°(Tele)	136°(Wide)~65°(Tele)	
Min. Object Distance		1.3m	1.3	1.3m(4.27ft)	1.3m(4.27ft)	5m(16.4ft)
Focus Control		Simple focus	Simple focus	Simple focus	Simple focus	Oneshot AF, Focus save

### Lens

Lens Type	Fixed iris	Fixed iris	Fixed iris	Fixed iris	DC auto iris	
<b>Pan / Tilt / Rotate</b>						
<b>Pan / Tilt / Rotate Range</b>	Pan	0°~360°	0°~360°	0°~360°	0°~360°	360° Endless
	Tilt	9°~65°	9°~65°	9°~65°	9°~65°	0°~110°
	Rotate	0°~90°	0°~90°	0°~90°	0°~90°	
	Others	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	
<b>Pan Speed</b>	Preset					Max. 700°/sec
	Manual					0.024°/sec~250°/sec
<b>Tilt Speed</b>	Preset					Max. 500°/sec
	Manual					0.024°/sec~250°/sec
<b>Sequence</b>		Preset(255ea)	Preset(255ea)	Preset(255ea)	Preset(255ea)	Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule
<b>Preset Accuracy</b>						Up to ±0.1°, Pan/Tilt correction

### Operational

<b>Direction Indicator</b>						Support
<b>Day &amp; Night</b>	Auto(ICR)					
<b>Backlight Compensation</b>	BLC, WDR, SSSDR	BLC, WDR, SSSDR	BLC, WDR, SSSDR	BLC, WDR, SSSDR	BLC, WDR, SSSDR	BLC, HLC, WDR, SSSDR
<b>Wide Dynamic Range (dB)</b>	120	120	120	120	120	150
<b>Digital Noise Reduction</b>	WiseNR II (Based on AI engine), SSNR V					
<b>Digital Image Stabilization</b>						Support
<b>Defog</b>						Support
<b>Motion Detection</b>	Quantity	8ea				
	Shape	8point Polygonal zones				
<b>Privacy Masking</b>	Quantity	6ea	6ea	6ea	6ea	32ea
	Shape	Rectangular zones	Rectangular zones	Rectangular zones	Rectangular zones	4point Quadrangle zones
	Color / Option	Gray, Black, White	Gray, Black, White	Gray, Black, White	Gray, Black, White	Gray, Green, Red, Blue, Black, White, Mosaic
<b>Gain Control</b>	Low, Middle, High	Low, Middle, High	Low, Middle, High			Off, Max gain, Manual
<b>White Balance</b>	ATW, AWC, Manual, Indoor, Outdoor	ATW, AWC, Manual, Indoor, Outdoor	ATW, AWC, Manual, Indoor, Outdoor			ATW, NarrowATW, AWC, Manual, Indoor, Outdoor, Mercury, Sodium

## Operational

LDC		Support	Support			
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)				
	Speed Range	2~1/12,000sec				
Video Rotation		Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip&Mirror
Alarm Interface	Others	Support alarm I/O via optional I/O box				
Alarm Triggers		Analytics, Network disconnect, Alarm input, App event, Time schedule, MQTT subscription				
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output, Handover: PTZ preset,send message by HTTP/HTTPS/TCP, MQTT: publication,Smart zoom				
Audio In		Support via optional I/O box				
Audio Out		Support via optional I/O box				
Light Type		IR LED				
Light Viewable Length	IR	20m(65.62ft)	20m(65.62ft)	20m(65.62ft)	20m(65.62ft)	200m(656.17ft)
IR Wavelength		850nm				
Water Removal						Support(Spin Dry, Lens heater)
Auto Tracking						Object auto tracking(Person/Vehicle), Target lock tracking

## Analytics

Classified Object Type		Person, Face, Vehicle, License plate				
Attributes	Vehicle	Type(car, bus, truck, motorcycle, bicycle)				
Thumbnail		BestShot	BestShot	BestShot	BestShot	DetectionShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)				
	Normal	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Motion detection, Tampering, Fog detection, Virtual area(Appear/Disappear)

## Network

Ethernet	Metal shielded RJ-45(10/100/1000BASE-T)				
Video Compression	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/Baseline/High, MJPEG
Smart Codec	Manual, WiseStreamIII				

## Network

<b>Bitrate Control</b>		H.265/H.264: CBR or VBR, MJPEG: VBR				
<b>Streaming</b>	Unicast	Up to 10 users	Up to 10 users	Up to 10 users	Up to 10 users	Up to 20 users
	Multicast	Support	Support	Support	Support	Support
	Multiple Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 10 profiles
<b>Protocol</b>		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT				
<b>Application Programming Interface</b>	ONVIF	S, T, M				
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform				
<b>Direct Cloud Connection</b>		Support				

## Security

<b>OS / Firmware Protect</b>	Encrypted firmware, Secure boot, Signed firmware
<b>User authentication</b>	Digest authentication
<b>Network authentication</b>	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
<b>Secure Communication</b>	HTTPS, WSS(WebSocket Secure), SRTP
<b>Access Control</b>	IP-based access control
<b>Data Protect</b>	Encryption credentials, Encrypt compress for live recording file export
<b>Audit</b>	Access / System / Event Log management
<b>Device ID</b>	Device certificate(Hanwha Vision Root CA)
<b>Secure Storage</b>	TPM(Trusted platform module), SDcard partition encrypt(AES-256)
<b>Security Certificate</b>	TPM 2.0 with FIPS 140-2 level2

## General

<b>Memory</b>	RAM	8GB	8GB	8GB	8GB	4GB
	Flash	1GB	1GB	1GB	1GB	512MB
<b>Edge Storage</b>	Micro SD/SDHC/SDXC	Max. 512GB x 2slot(Total 1TB)				

## Environmental & Electrical

<b>Operating Condition</b>	Temperature	-40°C~+50°C(-40°F~+122°F)
	Humidity	0~95% RH(non-condensing)
	Others	+74°C(+165°F)(Max) based on NEMA-TS 2(2.2.7). Start up should be done at above -30°C
<b>Storage Condition</b>	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
<b>EPA(Effective Projected Area)</b>	0.075	
<b>Input Voltage</b>	PoE++(IEEE802.3bt type4, Class8)	

## Environmental & Electrical

Power Consumption	PoE	Max. 64W, typical 45W
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## Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	ø379.8x301.9mm(14.95x11.89")
Product Weight	7,900g(17.42lb)

## Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471
Environment	IEC 60529 IP66, IEC 62262 IK10, NEMA TS 2-2013 (2.2.7, 2.2.8, 2.2.9), NEMA 250 type 4X

## DORI (EN62676-4 standard)

Detect (25PPM/8PPF)	Wide			54.8m(179.73ft) / Tele: 144.4m(473.88ft)	54.8m(179.73ft) / Tele: 144.4m(473.88ft)	59.5m(195.3ft) / Tele: 234.0m(767.8ft)
	Tele			/ Tele: 144.4m(473.88ft)	/ Tele: 144.4m(473.88ft)	/ Tele: 234.0m(767.8ft)
Observe (63PPM/19PPF)	Wide			21.9m(71.89ft) / Tele: 57.8m(189.55ft)	21.9m(71.89ft) / Tele: 57.8m(189.55ft)	23.8m(78.1ft) / Tele: 936.2m(3071.4ft)
	Tele			/ Tele: 57.8m(189.55ft)	/ Tele: 57.8m(189.55ft)	/ Tele: 936.2m(3071.4ft)
Recognize (125PPM/38PPF)	Wide			11.0m(35.95ft) / Tele: 28.9m(94.78ft)	11.0m(35.95ft) / Tele: 28.9m(94.78ft)	11.9m(39.1ft) / Tele: 468.1m(1535.7ft)
	Tele			/ Tele: 28.9m(94.78ft)	/ Tele: 28.9m(94.78ft)	/ Tele: 468.1m(1535.7ft)
Identify (250PPM/76PPF)	Wide			/ Tele: 28.9m(94.78ft)	5.5m(17.97ft) / Tele: 14.4m(47.39ft)	6.0m(19.5ft) / Tele: 234.0m(767.8ft)
	Tele			5.5m(17.97ft) / Tele: 14.4m(47.39ft)	/ Tele: 14.4m(47.39ft)	/ Tele: 234.0m(767.8ft)

# PNM-9322VQP

2MP/5MP x 5CH Multi-directional Camera



**CAD**

Unit: mm [inch]

