

# PNM-9320VQP

10MP to 22MP Multi-directional+ PTZ Network Camera



## Key Features

### Multi-directional camera

- Exchangeable 4ea x 2MP / 5MP lens modules  
8MP to 20MP resolution depend on the combination of lens modules
- WDR 150dB with 2MP lens module, 120dB with 5MP lens module
- 2.4mm, 2.8mm, 3.6mm, 6mm, 12mm fixed lens (2M module)
- 3.7mm, 4.6mm, 7mm fixed lens (5M module)

### PTZ camera

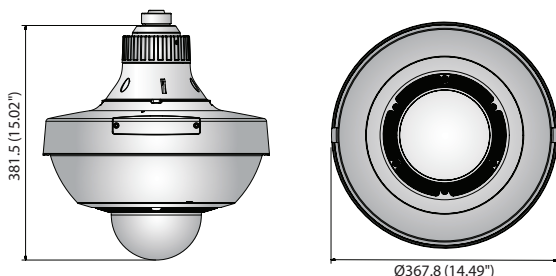
- Max. 2MP (1920 x 1080) resolution
- 4.44~142.6mm (Optical 32x) lens
- WDR 150dB, Day & Night (ICR)

### Common

- Max. 60fps@2M, Max. 30fps@5M (H.265 / H.264)
- H.265, H.264, MJPEG codec support
- Video Analytics, WiseStream II support
- SD / SDHC / SDXC memory 5 slots

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-300LM



SBP-300CM

	Multi-directional (CH 1 ~ 4)	PTZ (CH 5)
<b>VIDEO</b>		
Imaging Device	(See the optional lens)	1/2.8" 2.4M CMOS
Total / Effective Pixels	(See the optional lens)	1,981(H)x1,288(V), 2.55M / 1,944(H)x1,212(V), 2.35M
Scanning System	(See the optional lens)	Progressive scan
Min. Illumination	(See the optional lens)	Color : 0.05Lux (1/30sec, F1.6, 30IRE), BW : 0.005Lux (1/30sec, F1.6, 30IRE)
S / N Ratio	(See the optional lens)	50dB
Video Out	CVBS : 1.0 Vp-p / 75Ω composite, 720x480(N), 720 x 576(P), for installation	-
<b>LENS</b>		
Focal Length (Zoom Ratio)	(See the optional lens)	4.44 ~ 142.6mm (Optical 32x)
Max. Aperture Ratio	(See the optional lens)	F1.6(Wide)~F4.4(Tele)
Angular Field of View	(See the optional lens)	H : 61.8°(Wide)~2.19°(Tele) / V : 36.2°(Wide)~1.24°(Tele)
Min. Object Distance	(See the optional lens)	Wide : 1.5m, Tele : 2m
Focus Control	(See the optional lens)	Auto / Manual / One shot AF
Lens / Mount Type	(See the optional lens)	DC Auto Iris / Board-in type
<b>PAN / TILT / ROTATE</b>		
Pan / Tilt / Rotate Range	(See the optional lens)	360° Endless / 190°(-5°~185°)
Pan / Tilt Speed	-	Preset : 700°/ sec, Manual : 0.024°/ sec ~ 200°/ sec
Sequence	-	Preset (300ea), Swing, Group (128ea), Trace, Tour, Auto run, Schedule
Preset Accuracy	-	±0.2°
Auto tracking	-	On / Off
<b>OPERATIONAL</b>		
Camera Title	Off / On (Displayed up to 85 characters) - W/W : English / Numeric / Special characters - China : English / Numeric / Special / Chinese characters - Common : Multi-line (Max. 5), Color (Grey / Green / Red / Blue / Black / White), Transparency, Auto scale by resolution	
Day & Night	Electrical	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / HLC (Masking / Dimming) / WDR	
WDR	150dB (SLA-2M), 120dB (SLA-5M)	150dB
Contrast Enhancement	SSDR (On / Off)	
Digital Noise Reduction	SSNR5 (2D + 3D noise filter) (On / Off)	
Digital Image Stabilization	On / Off	On / Off (Built-in gyro sensor)
Defog	Off / Auto / Manual	
Motion Detection	On / Off (8ea, 8point polygonal zones), Hand over	
Privacy Masking	On / Off (32ea, polygonal zones)	On / Off (24ea, polygonal zones)
	Color : Grey / Green / Red / Blue / Black / White, - Mosaic	
Gain Control	Off / Low / Middle / High	
White Balance	ATW / AWC / Manual / Indoor / Outdoor (Included Mercury & Sodium)	
Contrast	Level adjustment	
LDC	On / Off (5 levels with Min / Max)	-
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1 / 12,000sec)	
Flip / Mirror	On / Off, Hallway view : 90° / 270°	On / Off
Video Analytics	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, Appear/Disappear, Face detection, Motion detection, Defocus detection (Multi-directional camera)	
Alarm I / O	Input 1ea / Output 2ea (Relay type)	
Alarm Triggers	Motion detection, Video analytics, Network disconnect	

	Multi-directional (CH 1 ~ 4)	PTZ (CH 5)
Alarm events	File upload via FTP, E-Mail, Notification via E-Mail, Local storage(SD/SDHC/SDXC) recording at event triggers, External output	
Pixel Counter	Support	
<b>NETWORK</b>		
Ethernet	RJ-45 (10 / 100 / 1000 BASE-T)	
SFP	SFP slot (100 / 1000Mbps)	
Video Compression Format	H.265 / H.264 (MPEG-4 Part 10 / AVC) : Main / Baseline / High, Motion JPEG	
Resolution	[5MP] 2560 x 1920, 2560 x 1440, 1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 320 x 240 [2MP] 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240	
Max. Framerate	H.265 / H.264 : 2M Max. 60fps, 5M 30fps at all resolutions Motion JPEG : Max. 30fps	
Smart Codec	Manual Mode (Area-based : 5ea)	
WiseStream II	Support	
Video Quality Adjustment	H.264 / H.265 / MJPEG : Target bitrate level control	
Bitrate Control Method	H.264 / H.265 : CBR or VBR MJPEG : VBR	
Streaming Capability	Multiple streaming (Up to 10 profiles)	
IP	IPv4, IPv6	
Protocol	TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTCP, RTPSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3 (MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour	
Security	HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1X Authentication (EAP-TLS, EAP-LEAP)	
Streaming Method	Unicast / Multicast	
Max. User Access	20 users at Unicast mode	
Streaming Method	Unicast / Multicast	
Edge Storage	SD / SDHC / SDXC 5slot (Each CH) - Motion Images recorded in the SD / SDHC / SDXC memory card can be downloaded. - Local PC for instant recording	
Application Programming Interface	ONVIF Profile S, SUNAPI (HTTP API)	
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek	
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Supported browser : Google Chrome 67, MS Edge 41, Mozilla Firefox 61 (Windows 64bit only), Apple Safari 11 (Mac OS X only), MS Explorer 11	
Central Management Software	SSM	
<b>ENVIRONMENTAL</b>		
Operating Temperature / Humidity	-35°C ~ +55°C (-31°F ~ +131°F) / Less than 90% RH	
Storage Temperature / Humidity	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH	
Ingress Protection / Vandal Resistance	IP66 / IK10	
<b>ELECTRICAL</b>		
Input Voltage / Current	HPoE (Injector included)	
Power Consumption	Max. 65W	
<b>MECHANICAL</b>		
Optional Lens	SLA-2M2400P / SLA-2M2800P / SLA-2M3600P / SLA-2M6000P / SLA-2M1200P SLA-5M3700P / SLA-5M4600P / SLA-5M7000P	-
Color / Material	Ivory / Metal	
Dimension (W x H x D)	Ø 367.8 x 381.5mm (14.49" x 15.02")	
Weight	7.05 kg (16.1 lb)	

\* The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)

\* Design and specifications are subject to change without notice.

\* Wisenet is the proprietary brand of **Hanwha Techwin**.

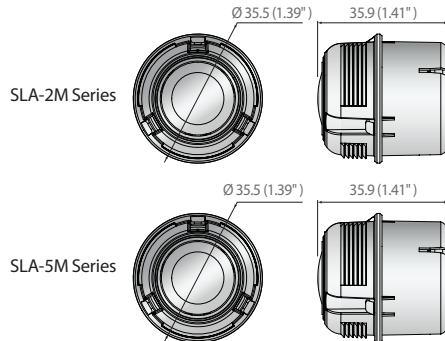
# SLA-2M2400P/2800P/3600P/6000P/1200P SLA-5M3700P/4600P/7000P

Exchangeable 2MP / 5MP lenses for PNM-9320VQP



## Dimensions

Unit: mm (inch)



## Key Features

- 0.055Lux@F2.0 Color, B/W (2MP lenses)
- 0.16Lux@F1.6 Color, B/W (5MP lenses)
- Selectable lens options:
  - 2.4 / 2.8 / 3.6 / 6.0 / 12.0mm fixed lens (2MP)
  - 3.7 / 4.6 / 7.0mm fixed lens (5MP)

	SLA-2M2400P	SLA-2M2800P	SLA-2M3600P	SLA-2M6000P
<b>VIDEO</b>				
Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Total Pixels	1945(H) x 1109(V) 2.16M	1945(H) x 1109(V) 2.16M	1945(H) x 1109(V) 2.16M	1945(H) x 1109(V) 2.16M
Effective Pixels	1945(H) x 1097(V) 2.13M	1945(H) x 1097(V) 2.13M	1945(H) x 1097(V) 2.13M	1945(H) x 1097(V) 2.13M
Scanning System	Progressive Scan	Progressive Scan	Progressive Scan	Progressive Scan
Min. Illumination	Color : 0.055Lux (F2.0, 1/30sec, 30IRE) B/W : 0.055Lux (F2.0, 1/30sec, 30IRE)	Color : 0.055Lux (F2.0, 1/30sec, 30IRE) B/W : 0.055Lux (F2.0, 1/30sec, 30IRE)	Color : 0.055Lux (F2.0, 1/30sec, 30IRE) B/W : 0.055Lux (F2.0, 1/30sec, 30IRE)	Color : 0.055Lux (F2.0, 1/30sec, 30IRE) B/W : 0.055Lux (F2.0, 1/30sec, 30IRE)
S / N Ratio	50dB	50dB	50dB	50dB
Wide Dynamic Range	150dB	150dB	150dB	150dB
Day & Night	Electrical	Electrical	Electrical	Electrical
<b>LENS</b>				
Focal Length (Zoom Ratio)	2.4mm	2.8mm	3.6mm	6mm
Max. Aperture Ratio	F2.0	F2.0	F2.0	F2.0
Angular Field of View	H:135.4°, V:71.2°, D:161.6°	H:107.4°, V:62.2°, D:122.0°	H:94.8°, V:49.3°, D:114.3°	H:50.4°, V:28.8°, D:58.1°
Lens Type	Fixed focal	Fixed focal	Fixed focal	Fixed focal
Mount Type	M12 Lens module with main unit	M12 Lens module with main unit	M12 Lens module with main unit	M12 Lens module with main unit
Pan / Tilt / Rotate Range	-90°~+90° / +52°~+56° / -180°~+180°	-90°~+90° / +26°~+80° / -180°~+180°	-90°~+90° / +22°~+84° / -180°~+180°	-90°~+90° / +10°~+95° / -180°~+180°
<b>MECHANICAL</b>				
Color / Material	Black / Plastic	Black / Plastic	Black / Plastic	Black / Plastic
Dimension (W x H x D)	Ø35.5 x 35.9 mm (1.39" x 1.41")	Ø35.5 x 35.9 mm (1.39" x 1.41")	Ø35.5 x 35.9 mm (1.39" x 1.41")	Ø35.5 x 35.9 mm (1.39" x 1.41")
Weight	30g (0.07 lb)	30g (0.07 lb)	30g (0.07 lb)	30g (0.07 lb)

	SLA-2M1200P	SLA-5M3700P	SLA-5M4600P	SLA-5M7000P
<b>VIDEO</b>				
Imaging Device	1/2.8" 2M CMOS	1/1.8" 5M CMOS	1/1.8" 5M CMOS	1/1.8" 5M CMOS
Total Pixels	1945(H) x 1109(V) 2.16M	3096(H) x 2094(V)	3096(H) x 2094(V)	3096(H) x 2094(V)
Effective Pixels	1945(H) x 1097(V) 2.13M	2616(H) x 1976(V)	2616(H) x 1976(V)	2616(H) x 1976(V)
Scanning System	Progressive Scan	Progressive Scan	Progressive Scan	Progressive Scan
Min. Illumination	Color : 0.055Lux (F2.0, 1/30sec, 30IRE) B/W : 0.055Lux (F2.0, 1/30sec, 30IRE)	Color : 0.16Lux (F1.6, 1/30sec, 30IRE) B/W : 0.16Lux (F1.6, 1/30sec, 30IRE)	Color : 0.16Lux (F1.6, 1/30sec, 30IRE) B/W : 0.16Lux (F1.6, 1/30sec, 30IRE)	Color : 0.16Lux (F1.6, 1/30sec, 30IRE) B/W : 0.16Lux (F1.6, 1/30sec, 30IRE)
S / N Ratio	50dB	50dB	50dB	50dB
Wide Dynamic Range	150dB	120dB	120dB	120dB
Day & Night	Electrical	Electrical	Electrical	Electrical
<b>LENS</b>				
Focal Length (Zoom Ratio)	12mm	3.7mm	4.6mm	7mm
Max. Aperture Ratio	F2.0	F1.6	F1.6	F1.6
Angular Field of View	H: 26.3° V: 14.9° D: 30.0°	H:97.5°, V:71.9°, D:126.2°	H:77.9°, V:57.9°, D:98.7°	H:50.7°, V:37.8°, D:63.8°
Lens Type	Fixed focal	Fixed focal	Fixed focal	Fixed focal
Mount Type	M12 Lens module with main unit	M12 Lens module with main unit	M12 Lens module with main unit	M12 Lens module with main unit
Pan / Tilt / Rotate Range	-90°~+90° / +10°~+97° / -180°~+180°	-90°~+90° / +36°~+73° / -180°~+180°	-90°~+90° / +21°~+85° / -180°~+180°	-90°~+90° / +12°~+93° / -180°~+180°
<b>MECHANICAL</b>				
Color / Material	Black / Plastic	Black / Plastic	Black / Plastic	Black / Plastic
Dimension (W x H x D)	Ø35.5 x 35.9 mm (1.39" x 1.41")	Ø35.5 x 35.9 mm (1.39" x 1.41")	Ø35.5 x 35.9 mm (1.39" x 1.41")	Ø35.5 x 35.9 mm (1.39" x 1.41")
Weight	30g (0.07 lb)	35g (0.08 lb)	35g (0.08 lb)	35g (0.08 lb)