

# PNM-9080VQ

8 Megapixel Multi-directional 360° Camera

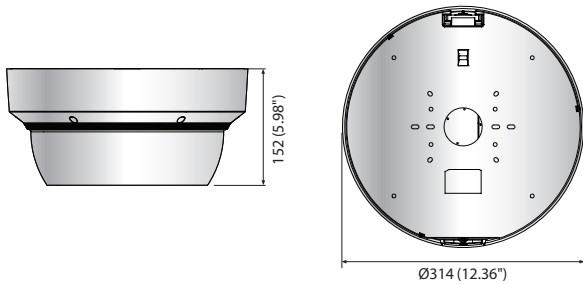


## Key Features

- 4ea x 1920x1080 resolution (Max. 8MP)
- 4ea x 2.8 ~ 12mm (4.3x) motorised varifocal lens
- 4ea x Max. 60fps@2M (H.265, H.264)
- Digital Image Stabilisation with Built-in Gyro Sensor
- H.265, H.264, MJPEG Codec Supported
- Day & Night (ICR), WDR (150dB)
- Motion detection, Tampering, Advanced Video Analytics
- SD / SDHC / SDXC Memory slot, WiseStreamII Support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



## PNM-9080VQ

<b>VIDEO</b>	
Imaging Device	1/2.8" 2.38M CMOS x4
Total / Effective Pixels	1,945(H) x 1,109(V) 2.16M x 4 / 1,945(H) x 1,097(V) 2.13M x 4
Scanning System	Progressive Scan
Min. Illumination	Colour: 0.015 Lux (F1.4, 1/30sec), B/W: 0.0015 Lux (F1.4, 1/30sec)
S / N Ratio	50dB
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720 x 480(N), 720 x 576(P), for installation (selectable CVBS per Channel)
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) motorised varifocal
Max. Aperture Ratio	F1.4(Wide) ~ F3.6(Tele)
Angular Field of View	H: 119.5°(Wide) ~ 27.9°(Tele), V: 62.8°(Wide) ~ 15.7°(Tele), D: 142.1°(Wide) ~ 32.0°(Tele)
Min. Object Distance	0.5m (1.64ft)
Focus Control	Simple focus (Motorised V/F) / Manual, Remote control via network (Manual, Simple focus)
Lens / Mount Type	DC Auto Iris, P-Iris / Board-in Type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	Quad mode : ±30° / 10° ~ 41° / ±90°, Center mode : ±60° / 10° ~ 41°, 10° ~ 90°(CH2/Center) / ±90°
<b>OPERATIONAL</b>	
Camera Title	Off / On (Displayed up to 85 characters) : Each Ch - WW : 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	Auto (ICR) / Colour / B/W / External / Schedule
Backlight Compensation	Off / BLC / HLC (Masking / Dimming), WDR
Wide Dynamic Range	150dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNRV (2D + 3D Noise Filter) (Off / On)
Digital Image Stabilization	Off / On (Built-in Gyro sensor)
Defog	Off / Auto / Manual
Motion Detection	Off / On (8ea, 8point Polygonal zones)
Privacy Masking	Off / On (32ea, polygonal zones) - Colour : Grey / Green / Red / Blue / Black / White -
Gain Control	Auto / Manual / Middle / High / Manual
White Balance	ATW / AWC / Manual / Indoor / Outdoor (included Mercury & Sodium)
Contrast	Level Adjustment
LDC	Off / On (5 Levels with Min / Max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)
Digital Zoom	24x
Flip / Mirror	Flip : Off / On, Mirror : Off / On, Hallway View : 90° / 270°
Intelligent Video Analytics	Tampering, Loitering, Directional Detection, Defocus Detection, Fog Detection, Vertical Line, Enter/Exit, (Dis) Appear, Motion Detection
Alarm I/O	Input 1ea / Output 1ea
Alarm Triggers	Alarm Input, Motion Detection, Video Analytics, Network Disconnect, SD card error
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 (10/100/1000BASE-T)
Video Compression Format	H.265 / H.264 (MPEG-4 Part 10/AVC) : Main / Baseline / High, Motion JPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 450, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.265 / H.264 : Max. 60fps at all resolutions, Motion JPEG : Max. 30fps
Smart Codec / WiseStreamII	Manual Mode (Area-Based : 5ea) / Support
Video Quality Adjustment	H.265 / H.264 : Target Bitrate Level Control, MJPEG : Quality Level Control
Bitrate Control Method	H.265 / H.264 : CBR or VBR, with WiseStream, MJPEG : VBR
Streaming Capability	Multiple Streaming (Up to 40 Profiles)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, 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
Edge Storage	SD / SDHC / SDXC 4slot (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, Hungary, Greek Supported OS : Windows 7, 8, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin WebViewer Supported Browser : Google Chrome 54, MS Edge 38, Mozilla Firefox 49 (Windows 64bit only), Apple Safari 9 (Mac OS X only)
Web Viewer	Plug-in WebViewer Supported Browser : MS Explore 11, Apple Safari 9 (Mac OS X only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-40°C ~ +55°C (-40°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	12V DC, PoE+
Power Consumption	Max. 21.6W (12V DC), Max. 25.5W (PoE+)
<b>MECHANICAL</b>	
Colour / Material	Ivory / Aluminium
Dimensions (WxH)	Ø314 x 152mm (Ø12.36" x 5.98")
Weight	4.83kg (10.65lb)

\* 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.