



PNM-9022V

4CH x 2MP H.265 Panoramic 209° Camera

Benefits

- Covers a wide area with a single camera up to 180° and 209°
- Easy to install. Simply install back plate, put the camera on the hinge, clip into place and tighten 2 screws
- Enhanced cyber security with Wisenet 7 SoC
- Wisenet7 SoC includes improved extreme WDR technology to reduce noise that occurs within the WDR imaging process
- Lens Distortion Correction technology corrects video distortion created through the use of wide angle lenses, delivering video that more closely resembles what is seen through the human eye



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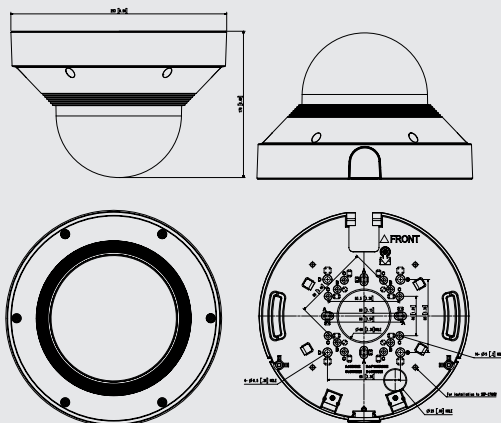
PNM-9022V	
VIDEO	
Imaging Device	1/2.8" CMOS x 4
Resolution	[209° Mode] 4608X1800, 4032X1576, 3456X1352, 2864X1124, 2304X900, 1728X676, 1152X452, 560X224, 720x576 [180° Mode] 4096X1800, 3584X1576, 3072X1352, 2560X1124, 2048X900, 1536X676, 1024X452, 512X224, 720X576
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(60Hz/50Hz)
Min. Illumination	Colour: 0.3Lux(F1.6, 1/30sec) Colour: 0.03Lux(F1.6, 1/30sec)
Video Out	USB : Micro USB Type B, 1280x720 for installation
LENS	
Focal Length (Zoom Ratio)	2.8mm fixed focal x 4
Max. Aperture Ratio	F1.6
Angular Field of View	H: 209°, V: 83.3°
Min. Object Distance	1.5m
Focus Control	Fixed
PAN / TILT / ROTATE	
Pan / Tilt / Rotate Range	0°~355° / 0°~60° / -
OPERATIONAL	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SDR
Wide Dynamic Range	extreme WDR(120dB)
Digital Noise Reduction	SSNRV
Defog	Supported
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, polygonal zones - Colour: Grey/Green/Red/Blue/Black/White - Mosaic
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2~1/12,000sec)
Digital PTZ	Supported (2CH)
Video Rotation	Flip, Mirror
Analytics	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection
Business Intelligence	Heatmap
Alarm I/O	Selectable 2 port
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC recording at event triggers Alarm output
Audio In	Selectable(mic in/line in/built-in mic) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max.output level: 1Vrms
NETWORK	
Ethernet	Metal shielded RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz
Smart Codec	Manual(5ea area), WiseStreamII
Video Quality Adjustment	H.264/H.265: Target bitrate level control MJPEG: Target bitrate level control

Key Features

- Max. 2MP x 4CH
- 209° Mode, 180° Mode support
- 2.8mm fixed focal lens x 4
- H.265/H.264 : Max. 30fps
- MJPEG : Max. 30fps
- extreme WDR (120dB)
- H.265, H.264, MJPEG codec, WiseStreamII supported
- Digital PTZ Support (2CH)
- Tampering, Heatmap
- IP66, IK10, NEMA4X

Dimensions

Unit:mm(inch)



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NETWORK

Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles)
Protocol	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, PIM-SM, UPnP, Bonjour, LLDP, SRTSP
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Techwin Root CA)
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform

GENERAL

Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish,, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 2slot 1TB(512GB X 2)
Memory	4GB RAM, 512MB Flash

ENVIRONMENTAL & ELECTRICAL

Operating Temperature / Humidity	Normal : -40°C~+55°C(-40°F ~ +131°F) / Intermittent : -40°C~+60°C(-40°F ~ +140°F) Less than 95% RH(Non-condensing)
Storage Temperature / Humidity	-50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH
Certification	IP66, IK10, NEMA4X
Input Voltage	PoE+(IEEE802.3at, Class4), 12VDC
Power Consumption	PoE+: Max 18W, Typical 10.4W 12VDC: Max 16W, Typical 9W

MECHANICAL

Colour / Material	White / Aluminum
RAL Code	RAL9003
Product dimensions / weight	Ø253x165mm(9.96"x6.5"), 3200g
Conduit hole	3/4"
Hanging mount(Dome)	SBP-276HMW

* The latest product information / specification can be found at hanwha-security.eu

* Wisenet is the proprietary brand of Hanwha Techwin.