



Network

Multi-sensor

## PNM-9031RV

15MP H.265 Panoramic Camera

FC | UL | CE | EAC

### Key Features

- Max. 15MP 192° panoramic stitching image
- Panoramic channel
- IR viewable length Maximum 20m (65.6ft), WiselR
- H.265 / H.264 : Max. 20fps
- MJPEG : Max. 15fps
- H.265, H.264, MJPEG codec, WiseStreamII supported
- Motion, Defocus detection, Virtual line, Enter / Exit
- (Dis)Appear, Audio detection, Motion detection, Handover, Heatmap
- microSD/SDHC/SDXC 2 slots, PoE+
- IP66, IK10, NEMA4X
- TPM 2.0 (FIPS 140-2 level 2)

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## Specifications

### Video

Imaging Device	1/2.8" 5MP CMOS (x4)
Resolution	[192° mode] 6720x2240 ~ 1536x512
Max. Framerate	H.265/H.264: Max. 20fps/20fps(60Hz/50Hz)@15MP MJPEG: Max. 15fps(60Hz/50Hz)
Min. Illumination	Under evaluation
Video Out	USB : Micro USB Type B, 1280x720 for installation

### Lens

Focal Length (Zoom Ratio)	4.0mm Fixed
Max. Aperture Ratio	F2.0
Angular Field of View	Min (Distance 5M) H: 195.3° x V: 63.6° / Max (Distance 100M) H: 197.0° x 63.6°
Min. Object Distance	3m(9.84ft)
Focus Control	Fixed

### Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	0~355° / 0~65° / -
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### Operational

Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V
Defog	Support
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, polygonal zones - Color: 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)
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 at event triggers Alarm output
Audio In	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max.output level: 1Vrms
IR Viewable Length	Min. 15m(49.2ft), Wise IR

## Network

<b>Ethernet</b>	Metal shielded RJ-45(10/100/1000BASE-T)
<b>Video Compression</b>	H.265/H.264: Main/Baseline/High, MJPEG
<b>Audio Compression</b>	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
<b>Smart Codec</b>	Manual(5ea area), WiseStream II
<b>Bitrate Control</b>	H.264/H.265: CBR or VBR MJPEG: VBR
<b>Streaming</b>	Unicast(15 users) / Multicast Multicast Multiple streaming(Up to 5 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, PIM-SM, UPnP, Bonjour, LLDP, PPPoE
<b>Security</b>	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) TPM 2.0 (FIPS 140-2 level 2)
<b>Application Programming Interface</b>	ONVIF Profile S/G/T SUNAPI(HTTP API)

## General

<b>Webpage Language</b>	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
<b>Edge Storage</b>	Micro SD/SDHC/SDXC 2slots 512GB (256GBx2)
<b>Memory</b>	8GB RAM, 4GB Flash

## Environmental & Electrical

<b>Operating Temperature / Humidity</b>	- Normal : -40°C~+55°(-40°F ~ +131°F) / - Intermittent : -40°C~+60°C(-40°F ~ +140°F), 8Hrs - Less than 95% RH(Non-condensing) * Startup should be above -30°C “
<b>Storage Temperature / Humidity</b>	-50°C~+60°C(-58°F~+140°F) / Less than 90% RH
<b>Certification</b>	IP66, IK10, NEMA4X
<b>Input Voltage</b>	PoE+ (IEEE802.3at, Class4), 12VDC
<b>Power Consumption</b>	PoE+: Max (25.5)W, Typical (10.4)W 12VDC: Max (16)W, Typical (9)W

## Mechanical

<b>Color / Material</b>	White / Aluminum
<b>RAL Code</b>	RAL9003
<b>Product Dimensions / Weight</b>	Ø253x160mm(Under evaluation) / 3.2Kg(Under evaluation)

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CAD

Unit: mm [inch]

