

Network

PNM-9031RV

15MP Panoramic Camera

Key Features

- Network vandal outdoor Multi-sensor dome camera
- Panoramic view with stitched image
- 5MP x 4 sensors, 15MP @ 20fps
- Triple codec: H.265 / H.264 / MJPEG with WiseStream II technology
- WDR 120dB
- IR viewable length: 20m (65.5')
- Built-in video analytics and sound classification
- Heatmap
- Bi-directional audio support
- Micro SD: 2 slots
- IP66 / IK10 / NEMA4X rated
- TPM 2.0 (FIPS 140-2 level 2) for enhanced cybersecurity
- Powered by PoE+ / 12VDC

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Specifications

Video

Imaging Device	Size	1/2.8"
	Type	CMOS
Resolution		6720x2240, 5952x1984, 4992x1664, 3840x1280, 3072x1024, 1920x640, 1152x384
Max. Framerate	H.265/H.264	20fps/20fps(60Hz/50Hz)
	MJPEG	15fps
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.1
	BW(1/30sec, 30IRE)	0.01
Video Out		USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.

Lens

Focal Length (mm)		4.3
Max Aperture Ratio (F number)	Wide	1.6
Angular Field of View	Horizontal	195.3°~197.0°
	Vertical	63.6°
Min. Object Distance		5m(16.4ft)
Focus Control		Fixed

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	0°~360°
	Tilt	0°~60°

Operational

Day & Night		Auto(ICR)
Backlight Compensation		BLC, WDR, SSDR
Wide Dynamic Range (dB)		120
Digital Noise Reduction		SSNR V
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones

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Operational

Privacy Masking	Quantity	6ea
	Shape	Rectangular zones
	Color / Option	Gray, Green, Red, Blue, Black, White
Gain Control		Low, Middle, High
White Balance		ATW, AWC, Manual, Indoor, Outdoor
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker
	Speed Range	1/5~1/12,000sec
Video Rotation		Flip, Mirror
Alarm Interface	In/Out	2 configurable I/O ports
Alarm Triggers		Analytics, Network disconnect, Alarm input, 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
Audio In		Selectable(mic in/line in)
Audio Out		Line out
Light Type		IR LED
Light Viewable Length	IR	WiseIR 20m(65.62ft) 4 individual zones with Automatic and Manual level adjustment
IR Wavelength		850nm

Analytics

Analytics Events	Normal	Defocus detection, Motion detection, Tampering, Audio detection, Virtual area(Intrusion/Enter/Exit), Virtual area(Appear/Disappear), Virtual line(Crossing, Direction)
Business Intelligence	Normal	Heatmap

Network

Ethernet		Metal shielded RJ-45(10/100/1000BASE-T)
Video Compression		H.265: Main, H.264: Main/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, WiseStream II
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 15 users
	Multicast	Support
	Multiple Streaming	Up to 3 profiles
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, PIM-SM

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Network

Application Programming Interface	ONVIF	S, G, T
	Others	SUNAPI(HTTP API)

Security

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

General

Memory	RAM	8GB
	Flash	4GB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 2slot(Total 512GB)

Environmental & Electrical

Operating Condition	Temperature	-40°C~+55°C(-40°F~+131°F)
	Humidity	0~95% RH(non-condensing)
	Others	Start up should be done at above -30°C
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		PoE+(IEEE802.3at, Class4), 12VDC
Power Consumption	PoE	Max. 23.5W, typical 18W
	12VDC	Max. 20.5W, typical 16W

Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	ø253x170mm(9.96x6.69")
Product Weight	2,900g(6.39lb)
Compatible Conduit Hole	19.1mm(3/4")(M25)
Compatible Gang Box	Single, Double, 4" Octagon, Square

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Certifications & Standards

Environment	IEC 60529 IP66, IEC 62262 IK10, NEMA 250 type 4X

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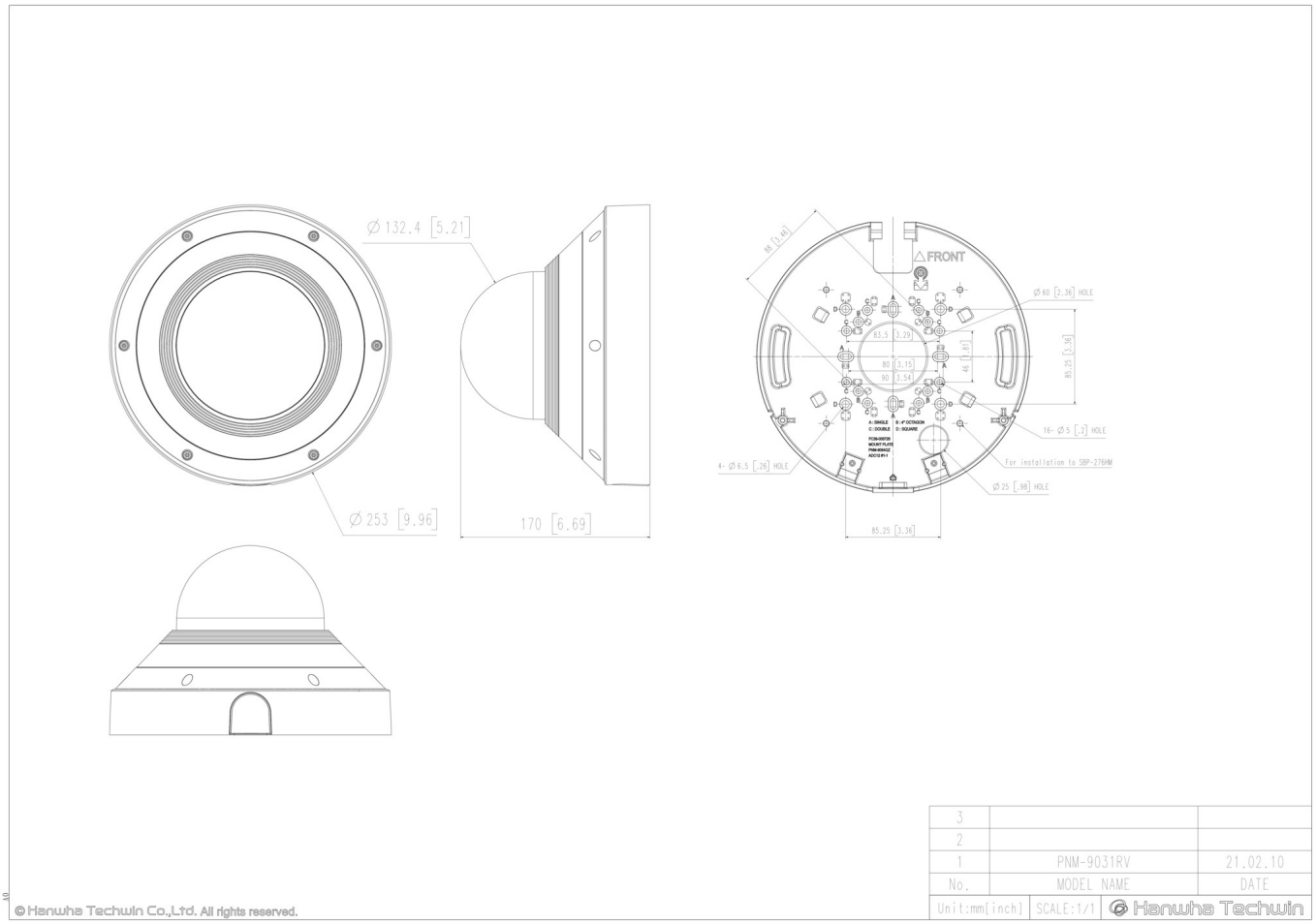
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CAD

Unit: mm [inch]



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