



Network

Multi-sensor

# PNM-C32083RVQ

4K x 4ch AI Camera



## Key Features

- 360° Analytics events based on AI engine: Classified object (Person/Face/Vehicle/License plate)
- 360° Attributes search (Vehicle type: Car/Bus/Truck/Motorcycle/Bicycle)
- AI based loitering detection and line crossing detection
- AI based WiseNR II, Auto prefer shutter control, WiseStreamIII
- Compact size & semi-modular design
- Next level cybersecurity (TPM 2.0 with FIPS 140-2 level2)
- Reinforced durability (IP66, IK10, NEMA4X)

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## Specifications

Video	
Imaging Device	1/2.8" CMOS x 4CH
Resolution	3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	[AI On] H.265/H.264: Max. 15fps/15fps(60Hz/50Hz) MJPEG: Max. 15fps/15fps(@8MP Max. 5fps) [AI Off] H.265/H.264: Max. 20fps/20fps(60Hz/50Hz) MJPEG: Max. 20fps/20fps(@8MP Max. 5fps)
Min. Illumination	Color: 0.1Lux(F1.5, 1/30sec, 30IRE) BW: 0.01Lux(F1.5, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	3.3~5.7mm(1.7x) motorized varifocal
Max. Aperture Ratio	F1.5(Wide)~F1.9(Tele)
Angular Field of View	H: 109°(Wide)~56°(Tele) V: 55°(Wide)~31°(Tele) D: 136°(Wide)~65°(Tele)
Min. Object Distance	1.3m(4.27ft)
Focus Control	Simple focus
Lens Type	Fixed iris
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0°~360° / 0°~65° / 0°~90°
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V, WiseNR II (Based on AI engine)
Motion Detection	8ea, 8point Polygonal zones
Privacy Masking	6ea, rectangular zones - Color: Grey/Black/White
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(1/5~1/12,000sec) Prefer shutter control(Based on AI engine)
Video Rotation	Flip, Mirror, Hallway view(90°/270°) - Each channel separately

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com)  
Hanwha Vision is formerly known as Hanwha Techwin.

Analytics	Classified object type: Person/Vehicle Attributes: Vehicle(Type: car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine - Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit) Analytics events - Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual area(Appear/Disappear)
Alarm I/O	2 configurable I/O ports * Support extra alarm I/O via optional SPM-4210 I/O box
Alarm Triggers	Analytics, Network disconnect, Alarm input, App event, 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 - Handover: PTZ preset, send message by HTTP/HTTPS/TCP - Audio clip playback - MQTT: publication
Audio In	Selectable(mic in/line in)
Audio Out	Line out
IR Viewable Length	PoE+: WiseIR 15m(49.21ft) HPoE: WiseIR 20m(65.62ft)
<b>Network</b>	
Ethernet	Metal shielded RJ-45(10/100/1000BASE-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), WiseStream II, WiseStreamIII(Based on AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(10 users) / Multicast Multiple streaming(Up to 3 profiles per channel)
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, UPnP, Bonjour, LLDP, SRTP (TCP, UDP Unicast), MQTT
Application Programming Interface	ONVIF Profile S/T SUNAPI(HTTP API) Wisenet open platform
<b>Security</b>	
OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
User authentication	Digest Authentication, Privent brute-force attack
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP, WSS(Websocket secure)
Access Control	IP address filtering
Data Protect	Authentication information encryption, ZIP compression encryption
Audit	User Access/System/Event log
Device ID	Device Certificate(Hanwha Private Root CA)
Secure Storage	TPM 2.0 with FIPS 140-2 level2
<b>General</b>	
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)

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Memory	8GB RAM, 1GB Flash
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#### Environmental & Electrical

Operating Temperature / Humidity	-40°C~+55°C(-40°F~+131°F) * Start up should be done at above -35°C 0~95% RH(non-condensing) Humidity control /w Air vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~95% RH
Certification	IP66, NEMA4X, IK10
Input Voltage	PoE+(IEEE802.3at Type2, Class4) HPoE(IEEE802.3bt Type3, Class6)
Power Consumption	PoE+: Max 25.5W, typical 22.0W HPoE: Max 33.0W, typical 22.0W

#### Mechanical

Color / Material	White / Aluminum Bubble: Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø250x114.2mm(ø9.84x4.50"), 2820g(6.22 lb)
Compatible Conduit hole / Gangbox	Conduit hole: 19.1mm(3/4")(M25) Gangbox: Single, Double, 4" Octagon, Square
Hanging Mount (Dome)	SBP-250HWM, SBP-276HWM

#### Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A RCM AS/NZS CISPR 32 Class A KS C 9832 Class A, KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471
Environment	IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10 NEMA 250 type 4X

#### DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide: 54.8m(179.73ft) / Tele: 144.4m(473.88ft)
Observe (63PPM/ 19PPF)	Wide: 21.9m(71.89ft) / Tele: 57.8m(189.55ft)
Recognize (125PPM/ 38PPF)	Wide: 11.0m(35.95ft) / Tele: 28.9m(94.78ft)
Identify (250PPM/ 76PPF)	Wide: 5.5m(17.97ft) / Tele: 14.4m(47.39ft)

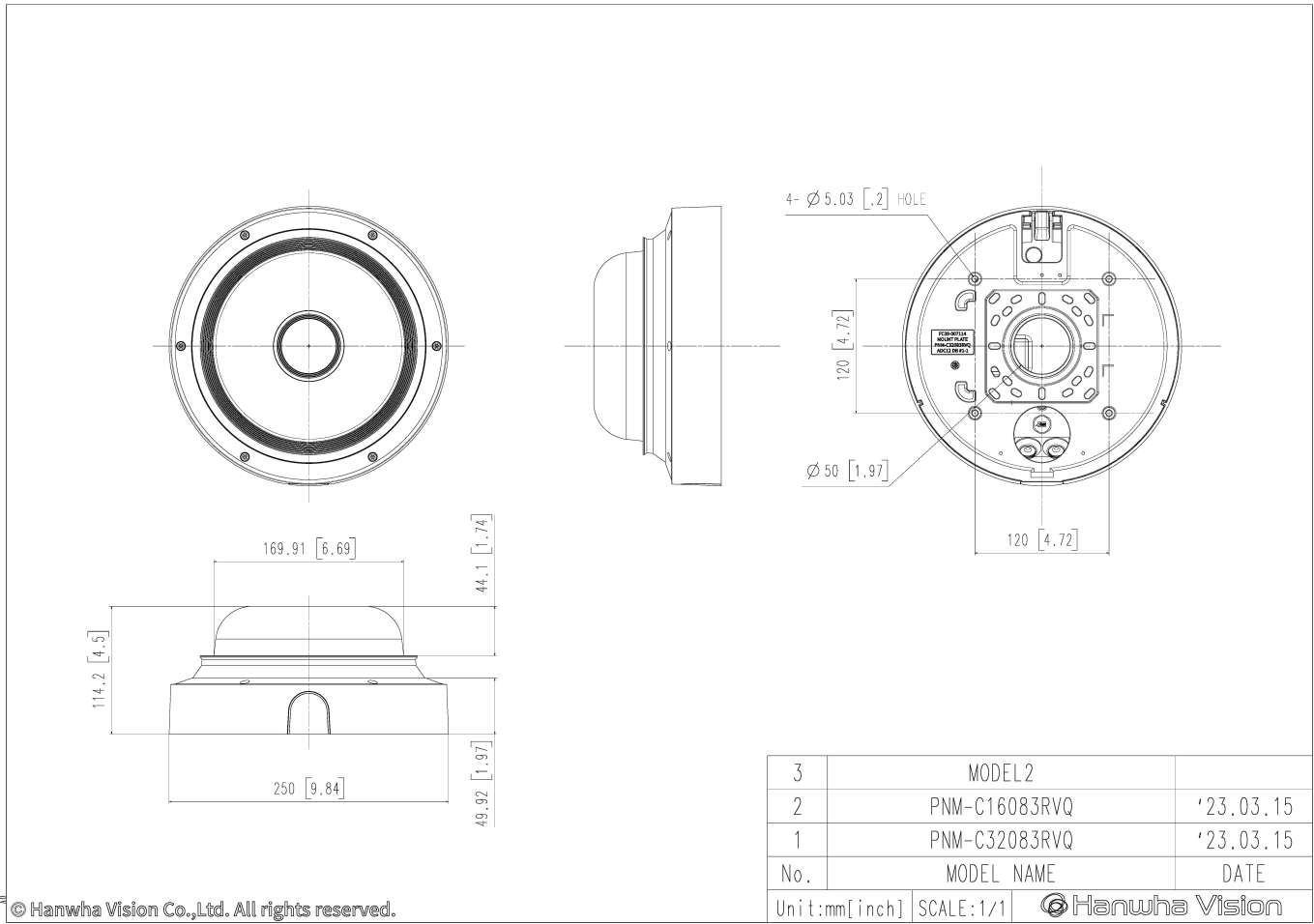
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CAD

Unit:mm [inch]



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