Hanwha Vision

Network

TNV-C8014RM

T AI 5MP IR Mobile Camera

FC | c(UL)us LISTED | C E | EAC | NDAA

Key Features

- Max. 5MP resolution
- 3.0 mm fixed lens
- Color: 0.03Lux(F1.6, 1/30sec), BW: 0.003Lux(F1.6, 1/30sec, 30IRE)
- Maximum 30fps@5MP (H.265/H.264)
- IR viewable length 30m (98.42ft)
- Hard-coated dome bubble,
- EIS, Shock detection, Heater, Built-in Mic
- H.265, H.264, MJPEG, WiseStreamIII (Using AI engine)
- Analytics events based on AI engine (NPU)
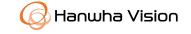- EN50155 compliance
- IP66, IK10
- PoE: Max 7.2W, M12 connector

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

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Specifications

Video

Imaging Device	1/2.8" CMOS
Resolution	2592x1944, 2560x1440, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) (WDR on/off) MJPEG: Max. 30fps(@5MP Max. 5fps)
Min. Illumination	Color: 0.03Lux (F1.6, 1/30sec) BW: 0.003Lux (F1.6, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation

Lens

Focal Length (Zoom Ratio)	3.0mm fixed focal
Max. Aperture Ratio	F1.6
Angular Field of View	H: 100°/ V: 73°/ D: 129°
Min. Object Distance	0.5m (1.64ft)
Focus Control	Fixed
Lens Type	Fixed IRIS
Mount Type	M12

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	±5° / 0°~67° / ±90°

Operational

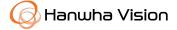|	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SSDR, Clear HDR
Wide Dynamic Range	120dB
Digital Noise Reduction	WiseNR II (Based on AI engine) SSNR V
Digital Image Stabilization	Support(built-in gyro sensor)
Defog	Support : Manual
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, 4point quadrangle zones - Color: Gray/Green/Red/Blue/Black/White Dynamic Privacy Mask - Mosaic
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/25,000sec) Prefer shutter control(Based on AI engine)

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Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Analytics	Classified object type: Person/Vehicle(Type:car/bus/truck/motorcycle/bicycle) Attributes: Person(Upper/lower clothes color), Vehicle(Type:car/bus/truck/motorcycle/bicycle and color) Support BestShot Analytics events based on AI engine - Motion detection*, Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit) Analytics events - Defocus detection, Tampering, Shock detection, Virtual area(Appear/Disappear) * Some of the video analytics only works with people and vehicle detection
Business Intelligence	Based on AI engine: People counting, Vehicle counting, Queue management, Heatmap
Alarm Triggers	Analytics, Network disconnect, MQTT subscription
Alarm Events	When alarm trigger occurred - File upload(image) : e-mail/FTP/SFTP - Notification : e-mail - Recording : SD/SDHC/SDXC or NAS recording at event triggers - Handover(PTZ preset, Send message by HTTP/HTTPS/TCP/Custom String) - Audio clip playback - MQTT: publication
Audio In	Selectable(Mic in/Line in/Built-in mic)
Audio Out	Line out
Light Type	IR LED (850nm)
Light Viewable Length	30m(98.42ft)

Network

Ethernet	M12(10/100BASE-T)
Video Compression	H.265/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(5ea area), WiseStreamIII(Based on AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 5 profiles)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Hanwha Vision Open Platform

Security

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User authentication	Digest authentication, Prevent brute-force attack
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure)
Access Control	IP-based access control
Data Protect	Encryption credentials, Encrypt compress for live recording file
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	SDcard partition encrypt

General

Webpage Language	English, Korean, Simplified Chinese, Traditional Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB
Memory	2GB RAM, 1GB Flash

Environmental & Electrical

Operating Temperature / Humidity	-40°C~+55°C(-40°F~+131°F) / 0~100% RH(Condensing) * Start up should be done at above -30°C Humidity control /w Air vapor control
Storage Temperature / Humidity	-40°C~+55°C(-40°F~+131°F) / 0~95% RH
Certification	IP66, IK10
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 7.2W, typical 4.2W

Mechanical

Color / Material	White / Aluminum
RAL Code	RAL9003
Product Dimensions / Weight	106x105x55mm(4.17x.4.13x2.17"), 466g(1.03 Ib)

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 Railway/Vehicle Application EN50121-4, EN50121-3-2
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 Railway/Vehicle Application JIS E 5006, IEC62236-3-2, IEC62236-4, EN50121-4, , JIS E 4031, EN50498, EN50155, IEC/EN61373, EN45545-2 HL3,

Compatible Models

Dome Cover	SPB-VAN23W, SPG-VAN23W
Other Compatible Models	SBD-110GPA

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	43.5m(142.71ft)
Observe (63PPM/ 19PPF)	17.5m(57.09ft)
Recognize (125PPM/ 38PPF)	8.7m(28.54ft)
Identify (250PPM/ 76PPF)	4.3m(14.27ft)

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TNV-C8014RM

T AI 5MP IR Mobile Camera

CAD

Unit:mm [inch]

3- Ø 5 [.2] Hole

87.6 [3.45]
105 [4.13]

66 [2.6]
106 [4.17]

55 [2.17]

3	MODEL 2	
2	MODEL 1	
1	TNV-C8014RM/C8034RM	'24.08.22
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/1	Hanwha Vision