

Network

TNV-C7013RC

3MP AI IR Vandal Corner Camera

Key Features

- CloudConnector Compatible – Connects easily with HealthPro, OnCloud
- Anti-ligature design for corrections and behavioral health facilities
- 3 Megapixel (2048 x 1536) resolution
- 30fps @ all resolutions (H.265/H.264/MJPEG)
- Invisible 940nm IR LED with 15m (49.21ft) Wise IR
- 0.3 lux @ F2.0 (Color), 0 lux @ F2.0 (B/W)
- Built-in fixed lens 2.39mm (H:128°, V:100°)
- H.265, H.264, MJPEG triple codec support, Multiple streaming
- extremeWDR 120dB, Improve image quality based on AI (WiseStreamIII, WiseNRII, prefer shutter control)
- Classified object type: Person/Face/License Plate/Vehicle (car, truck, bus, bicycle, motorcycle)
- Analytics events based on AI engine: IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion)
- AI Clothing color detection (Orange/Black/Red) to alert on inmates in prohibited areas, in color mode only
- Day & Night
- microSD/SDHC/SDXC memory slot (Maximum. 256GB)
- Hallway view, WiseStream II support
- PoE, DC 12V, IK10+, IP66, IP6K9K
- Built-in mic/audio input support
- Operating Temperature -10°C ~ +55°C (14°F ~ +131°F)
- Conduit compatible when used with optional SPG-VAN13W, not for use in anti-ligature environments

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Specifications

Video

Imaging Device	Size	1/1.8"
	Type	CMOS
Resolution		2048x1536, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@3MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.04
	BW(1/30sec, 30IRE)	0.004

Lens

Focal Length (mm)		2.39
Max Aperture Ratio (F number)	Wide	2.0
Angular Field of View	Horizontal	128°
	Vertical	100°
Min. Object Distance		0.5m(1.64ft)
Focus Control		Fixed

Operational

Day & Night		Auto(ICR)
Backlight Compensation		BLC, HLC, WDR, SSDR
Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization		Support
Defog		Support
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	4point Quadrangle zones
	Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic

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Operational

Gain Control		Off, Max gain, Manual
White Balance		ATW, NarrowATW, AWC, Manual, Indoor, Outdoor
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker
	Speed Range	2~1/12,000sec
Video Rotation		Flip, Mirror, Hallway view(90°/270°)
Alarm Interface	In/Out	2 configurable I/O ports
	Others	Support extra alarm I/O via optional 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/SFTP, File upload(video clip): FTP/SFTP, 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), Built-in mic
Audio Out		Line out
Light Type		IR LED
Light Viewable Length	IR	WiseIR 15m(49.21ft)
IR Wavelength		940nm

Analytics

Classified Object Type		Person, Face, Vehicle, License plate
Attributes	Vehicle	Type(car, bus, truck, motorcycle, bicycle)
Thumbnail		DetectionShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection
	Normal	Defocus detection, Tampering, Fog detection, Audio detection, Sound classification, Virtual area(Appear/Disappear)

Network

Ethernet		Metal shielded RJ-45(10/100BASE-T)
Video Compression		H.265: Main, 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, WiseStreamIII
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 20 users
	Multicast	Support
	Multiple Streaming	Up to 10 profiles

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Network

Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, SMTP, ICMP, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast)
Application Programming Interface	ONVIF	S, G, T, M
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Support

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), SRTP
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), HTPM(Hanwha Trusted Platform Module), SDcard partition encrypt(AES-256)
Security Certificate	TPM 2.0 with FIPS 140-2 level2

General

Memory	RAM	4GB
	Flash	512MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 1TB x 1slot

Environmental & Electrical

Operating Condition	Temperature	-10°C~+55°C(+14°F~+131°F)
	Humidity	0~95% RH(non-condensing)
	Others	Humidity control with AIR vent
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		PoE(IEEE802.3af, Class3), 12VDC
Power Consumption	PoE	Max 12.95W, typical 9.7W
	12VDC	Max 12.7W, typical 9.0W

Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	198.3(W)x104.8(H)x198.6(D)mm(7.87x4.13x7.82")

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Mechanical

Product Weight	1935g(4.27 lb)

Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 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 62471
Environment	IEC/EN 63000, ISO 20653 IP6K9K, IEC 62262 IK11, NEMA 250 type 4X, IEC 60529 IP66/IP69

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	35.1m(115.16ft)
Observe (63PPM/ 19PPF)	Wide	14m(45.93ft)
Recognize (125PPM/ 38PPF)	Wide	7.0m(22.97ft)
Identify (250PPM/ 76PPF)	Wide	3.5m(11.48ft)

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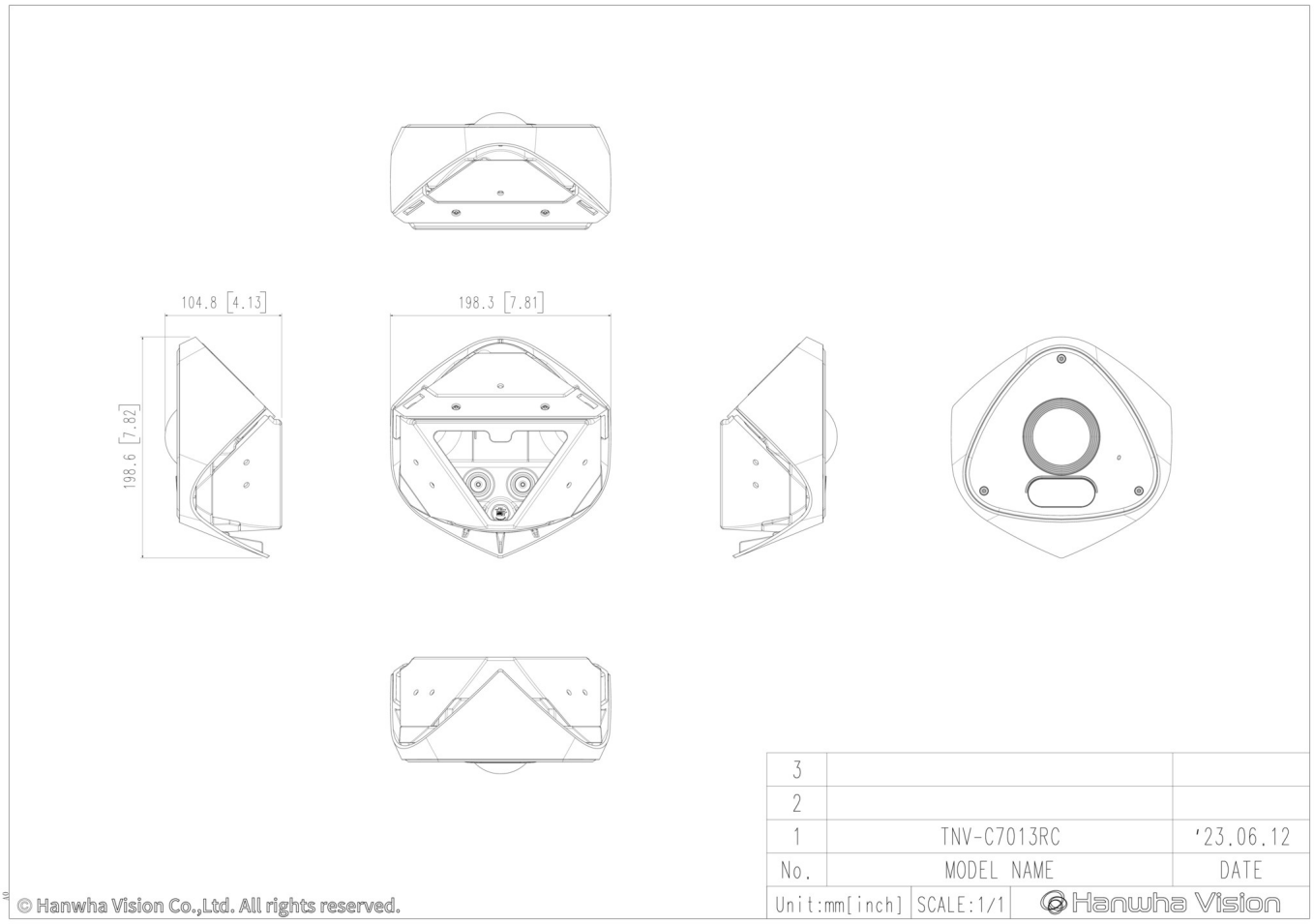
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CAD

Unit: mm [inch]



3		
2		
1	TNV-C7013RC	'23.06.12
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/1	Hanwha Vision

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