

Network Bullet

TNO-A9084ER

8MP AI IRバレットカメラ

Key Features

- 8MP Image Resolution
- 4.4~9.3mm Focal Length
- 50m IR Length
- IP67, IK10 Rated
- Built In AI Smoke detection
- Easy Installation with Conduit Adapter
- 1.63 Kg
- KCs, JPEx
- cULus Division 2 / ATEX & IECEx Zone 2 Certification

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Specifications

映像

Imaging Device	サイズ	1/1.8"
	タイプ	CMOS
解像度		3840x2160, 3328x1872, 3072x1728, 2688x1512, 2592x1944, 2560x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@8MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.04
	BW(1/30sec, 30IRE)	0.004
Video Out		USB: USB Type C. Preview and installation ONLY. Requires WiFi dongle.

レンズ

Focal Length (mm)		4.4~9.3
Zoom Ratio	Optical	2.1x
Max Aperture Ratio (F number)	Wide	1.3
	Tele	2.15
視野角度	Horizontal	113°~47°
	Vertical	58°~26°
	Diagonal	138°~54°
Min. Object Distance		0.5m(1.64ft)
Focus Control		シンプルフォーカス, 手動
Lens Type		P iris(IR corrected)

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	0°~350°
	Tilt	0°~90°
	回転	0°~350°

技能

Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC , WDR, SSDR

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技能

Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization		サポート
曇り除去		サポート
モーション検知	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	8point Polygonal zones
	Color / Option	灰色, 緑, Red, 青, 黒, 白, モザイク, 紫色, 黄色
	Dynamic Privacy Masking: Color / Option	灰色, 緑, Red, 青, 黒, 白, モザイク, 紫色, 黄色
ゲイン制御		オフ, 最大ゲイン, 手動
ホワイトバランス		ATW, NarrowATW, AWC, 手動, 室内, 屋外
LDC		Support(Fill/stretch mode)
Electronic Shutter	モード	最小, 最大, アンチフリッカー, Prefer shutter control(Based on AI engine)
	Speed Range	2~1/30,000sec
ビデオ回転		FLIPモード, ミラー, Hallway view(90°/270°)
Alarm Interface	In/Out	2 configurable I/O ports
	その他	Support extra alarm I/O via optional I/O box
Alarm Triggers		分析, ネットワーク切断, アラーム入力, タイムスケジュール, MQTT購読, デイ/ナイト, ストレージデバイスの停止
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,アラーム出力, Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback, MQTT: publication
オーディオ入力		Selectable(mic in/line in)
オーディオ出力		Line out
Light Type		IR LED
Light Viewable Length	IR	WiseIR 50m(164.04ft)
IR Wavelength		850nm

分析

Classified Object Type		人, 顔, 車両, ナンバープレート
属性	人	Upper/Lower clothes color, 性別, カバン
	車両	Type(car, bus, truck, motorcycle, bicycle), カラー
	顔	年齢, 性別, 顔マスク, メガネ
サムネイル		ベストショット

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分析

分析イベント	Based on AI Engine	対象物検知, 仮想線（交差·方向）, モーション検知, マスク検知, ソーシャルディスタンス検知, 転倒検知, 仮想領域（ローターリング、侵入、Enter、Exit、Appear、Disappear）, Smoke Detection
	通常	焦点ぼけ検知, タンパリング, 音声検出, 衝撃検知
Business Intelligence	Based on AI Engine	人数カウント, キュー管理, ヒートマップ, 車両カウント, 群衆カウント

ネットワーク

Ethernet		Metal shielded RJ-45(10/100BASE-T)
映像圧縮		H.265/H.264: Main/Baseline/High, MJPEG
Audio Compression		G.711(PCM): 8kHz(64kbps), G.726(ADPCM): 8kHz(16/24/32/40kbps), AAC-LC: 16kHz(48kbps), OPUS: 16kHz(64kbps)
Smart codec		WiseStream(Based on AI engine)
ビットレートコントロール		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	最大 20ユーザー
	マルチキャスト	サポート
	Multiple Streaming	最大 5プロファイル, 3 virtual channel support
プロトコル		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, SMTP(StartTLS), Syslog
Application Programming Interface	ONVIF	s, G, T, M
	その他	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		サポート

セキュリティ

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
ユーザー認証	ダイジェスト認証, 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, MAC-based access control, 自動ログアウト
Data Protect	Encryption credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
デバイスID	Device certificate(Hanwha Vision Root CA)
Secure Storage	SDcard partition encrypt(AES-256), Secure element
Supply Chain Security	SBOM
Security Certificate	Secure element(FIPS 140-3 level3, CC EAL6+), ETSI EN 303 645, IEC 62443-4-1

一般

SoC	Type	Wisenet 9
	Dual NPU	Support

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一般

メモリ	RAM	4GB
	フラッシュ	8GB eMMC
Edge Storage	Micro SD/SDHC/SDXC	Max. 1TB x 1slot
Edge Storage(OnCloud)	Micro SD/SDHC/SDXC	Max. 1TB x 1slot *Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.

Environmental & Electrical

動作条件	温度	-40°C~+60°C(-40°F~+140°F)
	湿度	0~100% RH(condensing)
	その他	+74°C(+165°F)(Max) based on NEMA-TS 2(2.2.7), Start up should be done at above -30°C, Humidity control with AIR vent
保管条件	温度	-50°C~+60°C(-58°F~+140°F)
	湿度	0~90% RH(non-condensing)
EPA(Effective Projected Area)		0.02㎡
Input Voltage		PoE(IEEE802.3af, Class3)
消費電力	PoE	Max. 11.2W, typical 8.4W
WisePower		電力モニタリング, Ecoモード

Mechanical

カラー		ダークグレー
材料		アルミニウム, PC(Polycarbonate), Hard-coated window
Material Management	Declaration	RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), REACH(Regulation (EC) No. 1907/2006), Conflict mineral policy(Section 1502 of US Dodd Frank Act)
RAL Code		RAL7022
Product Dimensions		ø93.4x276.6mm(3.68x10.89")
Product Weight		1,630g(3.59lb)
Compatible Conduit Hole		Support conduit compatibility via optional adaptor
Compatible Gang Box		シングル, Double, 4" Octagon, 正方形

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
環境	IEC/EN 63000, IEC 60529 IP66, IEC 60529 IP67, IEC 62262 IK10, NEMA TS 2-2013 (2.2.7, 2.2.8, 2.2.9), NEMA 250 type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, INMETRO Zone2, cULus Division2, IECEx Zone2, ATEX Zone2, JPEx Zone2

AI Detection Distance

Person(1.8m/5.9ft)	Wide	up to 35m(116ft)
	Tele	up to 85m(278ft)

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AI Detection Distance

Vehicle(1.45m/4.8ft)	Wide	up to 47m(153ft)
	Tele	up to 112m(368ft)

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	50.8m(166.77ft)
	Tele	176.6m(579.49ft)
Observe (63PPM/ 19PPF)	Wide	20.3m(66.71ft)
	Tele	70.7m(231.80ft)
Recognize (125PPM/ 38PPF)	Wide	10.2m(33.35ft)
	Tele	35.3m(115.90ft)
Identify (250PPM/ 76PPF)	Wide	5.1m(16.68ft)
	Tele	17.7m(57.95ft)

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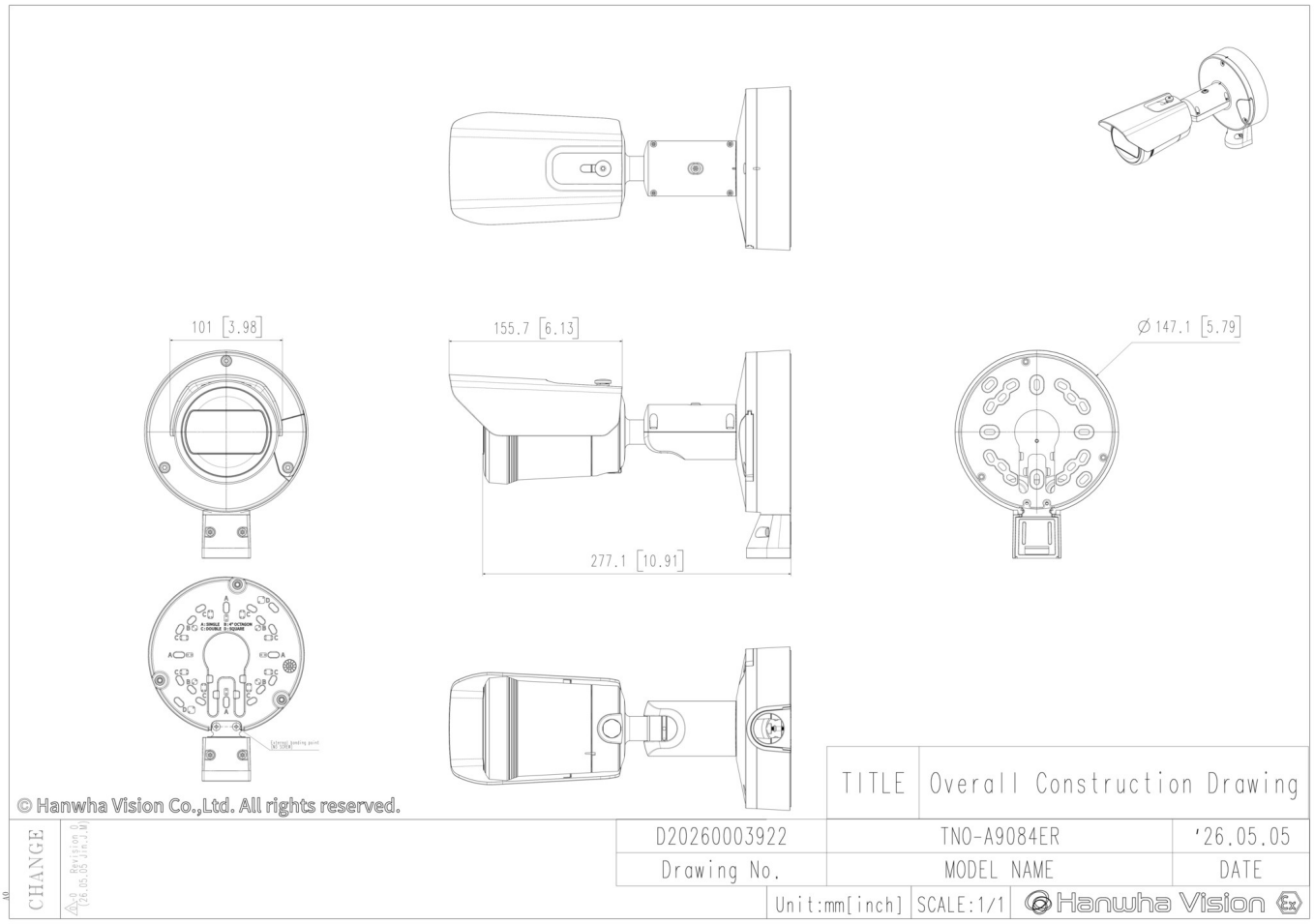
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CAD

Unit: mm [inch]



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