

Network Thermal

TNM-C4950TD

Cámara térmica con IA de doble espectro

Key Features

- Cámara térmica Wisenet T de red Bi-spectrum AI con una cámara de sensor dual con una salida de video VGA térmico y 4K visible.
- Lente fija integrada de 13,5 mm (FoV: 31,9° térmico) y lente varifocal motorizada de 10,9~29 mm (FoV: 42°~15° visible)
- Códec triple (H.265/H.264/MJPEG), Wise Stream III (visible), WiseStream II (térmico)
- WDR 120dB
- Funciones basadas en el motor de IA: WiseNR II, Wise Stream III (solo visible), eventos de análisis basados en el motor de IA (solo visible): detección de objetos (persona/rostro/vehículo/matrícula), IVA (línea/área virtual, entrada/salida, merodeo, dirección, intrusión), vehículo detenido, atasco de tráfico
- FIP 140-2
- 2 tarjetas micro SD (512 GB x 2)
- IP66/IP67, IK10, NEMA4X, NEMA TS 2 (2.2.8, 2.2.9)
- PoE+/12 VCC
- Diseño todo en uno para montaje en pared y poste

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Specifications

Video		Thermal	Visible
Imaging Device	Size		1/1.8"
	Type	Uncooled micro bolometer (640x480)	CMOS
Resolution		1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360	3840x2160, 3072x1728, 2688x1520, 2592x1944, 2560x1440, 2048x1536, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)	
	MJPEG	3fps	1fps
	Others	Max. 15fps when both channel AI on	
Spectral Range		8~14㎛	
NETD		≤60mK	
Pixel Size		12㎛	
Min. Illumination (Lux)	Color(1/30sec, 30IRE)		0.06
	BW(1/30sec, 30IRE)		0.005
Video Out		USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.	

Lens			
Focal Length (mm)		13.5	10.9~29
Zoom Ratio	Optical		2.6x
Max Aperture Ratio (F number)	Wide	1.0	1.7
	Tele		1.73
Angular Field of View	Horizontal	31.9°	42.0°~15.0°
	Vertical	24.2°	22.8°~8.4°(Tele)
	Diagonal	39.5°	48.7°~17.1°
iFoV		0.47mRad	
Min. Object Distance		7.6m(24.93ft)	2.5m(8.20ft)
Focus Control		Fixed	Simple focus

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Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	-170°~+170°
	Tilt	-40° ~ 50°
Sequence		Preset(255ea)

Operational

Day & Night			Auto(ICR)
Backlight Compensation			BLC, WDR, SSDR
Wide Dynamic Range (dB)			120
Digital Noise Reduction			WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization			Support(built-in gyro sensor)
Motion Detection	Quantity	8ea	
	Shape	8point Polygonal zones	
Privacy Masking	Quantity	6ea	
	Shape	Rectangular zones	
	Color / Option	Gray, Black, White	
Gain Control			Low, Middle, High
White Balance			ATW, AWC, Manual, Indoor, Outdoor
LDC			Support
Electronic Shutter	Mode		Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Speed Range		1/5~1/12,000sec
Alarm Interface	In/Out	4 configurable I/O ports	
Alarm Triggers		Analytics, Network disconnect, Alarm input	
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	
Audio In		Selectable(mic in/line in)	
Audio Out		Line out	
Color Pallettes		Whitehot, Blackhot, Rainbow, Rainbow2, Sepia, Red, Iron, Custom	

Analytics

Classified Object Type		Person, Vehicle	Person, Face, Vehicle, License plate
Attributes	Vehicle		Type(car, bus, truck, motorcycle, bicycle)
Thumbnail		BestShot	

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Analytics

Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Stopped vehicle, Traffic jam	
	Normal	Motion detection, Temperature change detection	Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Lotering, Intrusion, Enter/Exit, Appear/Disappear)
Business Intelligence	Normal	Vehicle counting	

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		WiseStream II	Manual, WiseStream III
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR	
Streaming	Unicast	Up to 6 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, CDP, SRTP(TCP, UDP Unicast)	
Application Programming Interface	ONVIF	S, T	
	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
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 export
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	HTPM(Hanwha Trusted Platform Module), SDcard partition encrypt(AES-256)
Security Certificate	TPM 2.0 with FIPS 140-2 level2

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General

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

Environmental & Electrical

Operating Condition	Temperature	-40°C~+60°C(-40°F~+140°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	0~95% RH(non-condensing)
Input Voltage		PoE+(IEEE802.3at, Class4), 12VDC
Power Consumption	PoE	Max. 23.5W, Typ 16.0W
	12VDC	Max. 19.5W, Typ 14.0W

Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	353.4(W)x287.5(H)x191.2(D)mm(13.92x11.32x7.53")
Product Weight	4.53kg(9.99lb)

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
Environment	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

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide		200.1m(656.40ft)
	Tele		583.4m(1913.89ft)
Observe (63PPM/ 19PPF)	Wide		80.0m(262.56ft)
	Tele		233.3m(765.56ft)
Recognize (125PPM/ 38PPF)	Wide		40.0m(131.28ft)
	Tele		116.7m(382.78ft)
Identify (250PPM/ 76PPF)	Wide		20.0m(65.64ft)
	Tele		58.3m(191.39ft)

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DRI (Johnson's Criteria)

Detection	Person(1.67PPM)	672m(2,204ft)	
	Vehicle(0.65PPM)	1,717m(5,633ft)	
Recognition	Person(6.67PPM)	168m(551ft)	
	Vehicle(2.61PPM)	429m(1,408ft)	
Identification	Person(13.33PPM)	84m(276ft)	
	Vehicle(5.22PPM)	215m(704ft)	

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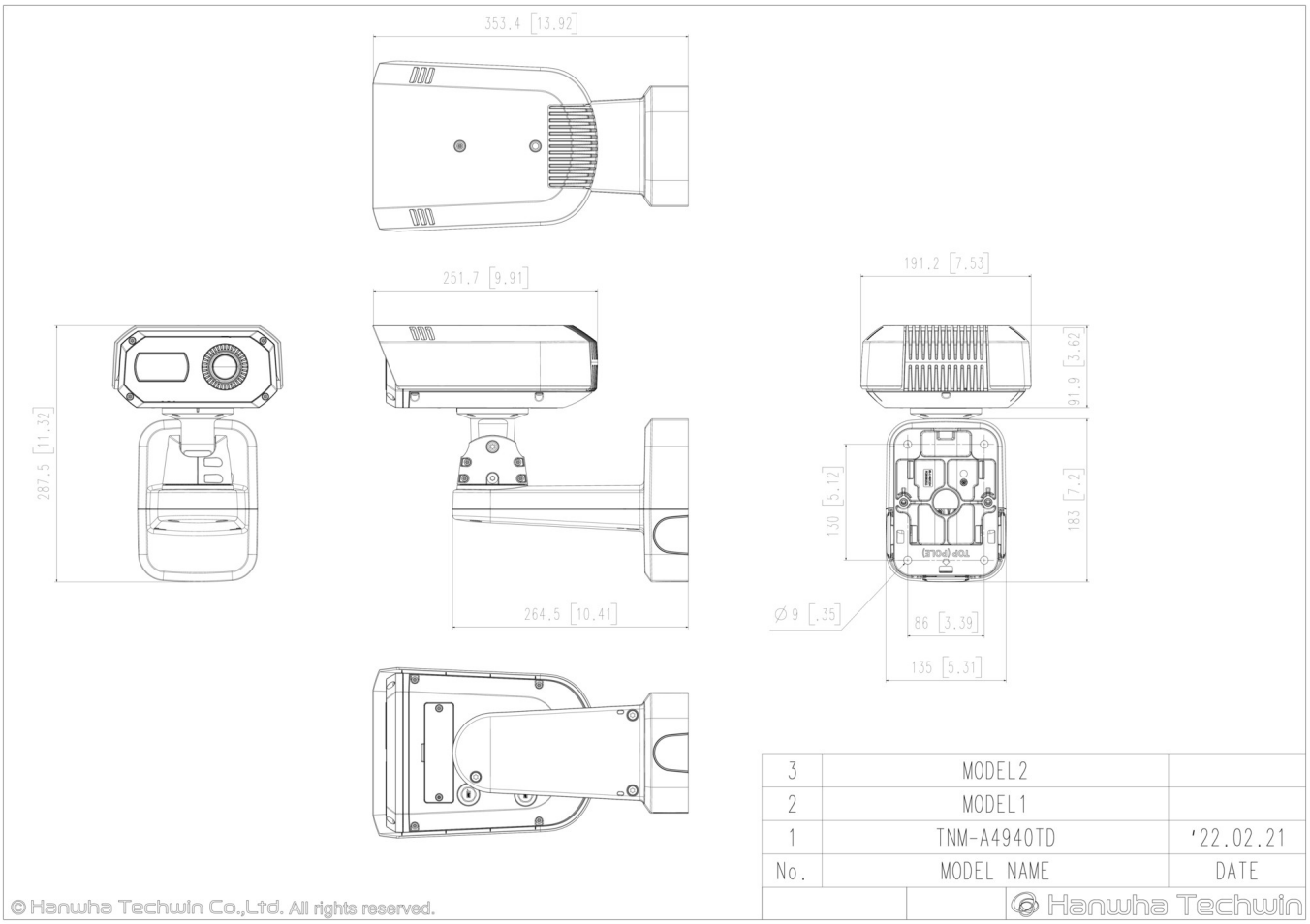
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CAD

Unit: mm [inch]



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