



Network

Thermal

TNM-C3620TDR

Bi-Spectrum AI Thermal Camera



Key Features

- Bi-spectrum monitoring with 2MP visible & QVGA thermal
- AI based Object classification with visible channel only (person)
- Remote Temperature Monitoring within -20 ~ 130°C range
- 6 of quadrangle ROI areas for temperature monitoring
- Compact and Light-weight for Indoor purpose

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Bi-Spectrum AI Thermal Camera



Specifications

映像		Thermal	Visible
Imaging Device	サイズ		1/2.8"
	タイプ	Uncooled micro bolometer (320x240)	CMOS
解像度		1280x960, 640x480, 320x240	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)	
	MJPEG	30fps	
Spectral Range		8~14 μ m	
NETD		≤50mK	
Pixel Size		12 μ m	
Min. Illumination (Lux)	Color(1/30sec, 30IRE)		0.05
	BW(1/30sec, 30IRE)		0.005
Video Out		CVBS: 1.0 Vp-p / 75 Ω composite for installation, USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.	

レンズ

Focal Length (mm)		4.7	4
Max Aperture Ratio (F number)	Wide	1.0	1.6
視野角度	Horizontal	50.0°	87.6°
	Vertical	36.4°	46.4°
	Diagonal	65.3°	104.5°
iFoV		2.553 mRad	
Min. Object Distance		1m(3.28ft)	
Focus Control		Fixed	Fixed

技能

Day & Night		Auto(ICR)
Backlight Compensation		BLC, HLC , SSDR
Wide Dynamic Range (dB)		150

技能

Digital Noise Reduction		SSNR V
Digital Image Stabilization		Support(built-in gyro sensor)
モーション検知	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	24ea
	Shape	Polygonal zones
	Color / Option	灰色, 緑, Red, 青, 黒, 白, モザイク
ゲイン制御		低, 中, 高
ホワイトバランス		ATW, AWC, 手動, 室内, 屋外
LDC		サポート
Electronic Shutter	モード	最小, 最大, アンチフリッカー
	Speed Range	2~1/12,000sec
ビデオ回転		FLIPモード, ミラー
Alarm Interface	In/Out	Input 1ea, Output 2ea
Alarm Triggers		分析, ネットワーク切断, アラーム入力, MQTT購読
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,アラーム出力, Handover: PTZ preset, MQTT: publication
オーディオ入力		Selectable(mic in/line in)
オーディオ出力		Line out
Color Palettes		Whitehot, Blackhot, Rainbow, Rainbow2, Sepia, Red, Iron, Custom

分析

Classified Object Type		人, 顔
分析イベント	Based on AI Engine	対象物検知
	通常	モーション検知, Virtual area(Intrusion/Enter/Exit), Virtual line(Crossing, Direction), 温度検知 モーション検知, タンパリング, 音声検出, Virtual area(Lotering, Intrusion, Enter/Exit, Appear/Disappear), Virtual line(Crossing, Direction)

Radiometry

Temperature Detect Range		-20°C~130°C
Temperature Accuracy		±5°C(≤100°C), ±20%(>100°C)
Temperature Detection ROI Zones	Quantity	6ea
	Shape / Option	Quadrangle
Hybrid Palettes		サポート
Spot Temperature Reading		サポート
ROI Condition Monitoring		以上, 以下, 増加, 減少

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 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		手動, WiseStream II
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 6プロファイル
プロトコル		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	s, T, M
	その他	SUNAPI(HTTP API)
Direct Cloud Connection		Optional (needs gateway)

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
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
デバイス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

一般

メモリ	RAM	4GB
	フラッシュ	512MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 1slot

Environmental & Electrical

動作条件	温度	-10°C~+55°C(+14°F~+131°F)
	湿度	0~95% RH(non-condensing)
保管条件	温度	-30°C~+60°C(-22°F~+140°F)
	湿度	0~95% RH(non-condensing)

Environmental & Electrical

Input Voltage		PoE+(IEEE802.3at, Class4), 12VDC
消費電力	PoE	Max. 17.0W, typical 12.5W
	12VDC	Max. 14.5W, typical 11.0W

Mechanical

カラー	白
材料	アルミニウム
RAL Code	RAL9003
Product Dimensions	135(W)x75(H)x188.5(D)mm(5.31x2.95x7.42")
Product Weight	1.7kg(3.77lb)

Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A, CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, IC Regulation ICES 003: 2016 ANSI C63.4 2014 Class A
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1
環境	IEC/EN 63000

DORI (EN62676-4 standard)

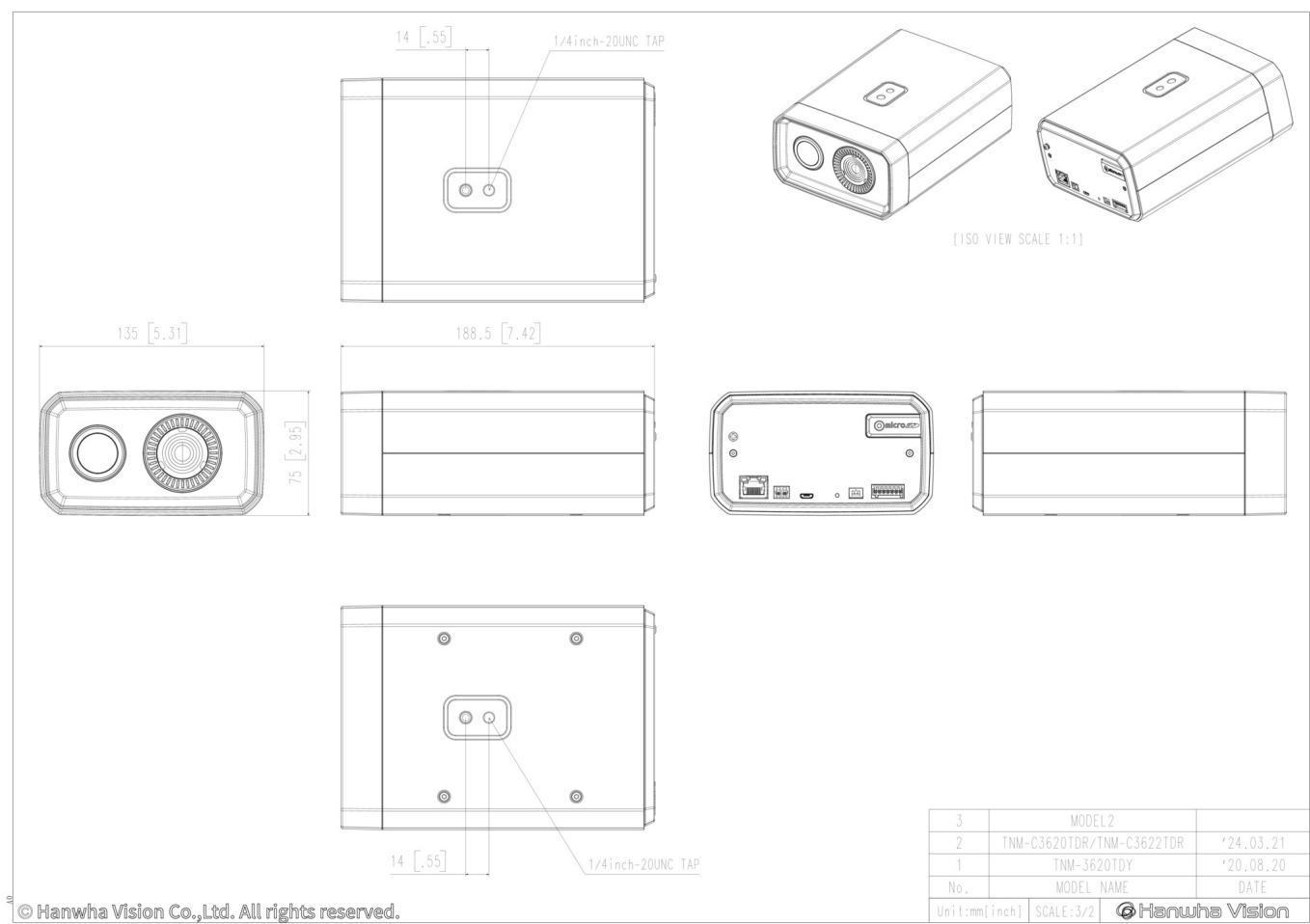
Detect (25PPM/ 8PPF)	Wide		80.1m(262.8ft)
Observe (63PPM/ 19PPF)	Wide		32.0m(105.1ft)
Recognize (125PPM/ 38PPF)	Wide		16.0m(52.6ft)
Identify (250PPM/ 76PPF)	Wide		8.0m(26.3ft)

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CAD

Unit: mm [inch]



Compatible Devices



SBP-142WMW