

TNM-3620TDY

Dual-Sensor Camera with AI Face and Body Temperature detection



Benefits

- Save time and unnecessary costs associated with false alarms, thanks to highly accurate detection and object classification that uses Deep Learning Artificial Intelligence technology
- Help keep businesses, government buildings and any public space safe through efficient temperature monitoring
- Fast detection of multi-point skin-surface temperature of a person
- Multi-person detection
- No physical contact required
- Immediate alarms notify operators
- Reduce false alarms by ignoring other heat sources with AI-based face detection, even while wearing a mask
- Accuracy within $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$), $\pm 0.3^{\circ}\text{C}$ ($\pm 0.54^{\circ}\text{F}$) with blackbody
- Verification and identification of subject with visible camera

※Proper installation and use of a blackbody device (optional) is recommended for best performance and accuracy. To ensure accuracy, please follow FDA Guidelines. Make sure to have an approved medical thermometer and trained staff for secondary body temperature screening for a person suspected of having an elevated temperature.

※Please note: Please contact Hanwha Techwin for information on purchasing thermal cameras. Thermal cameras may not be available for purchase by all customers or shipped to all locations. Hanwha Techwin America restricts the purchase and shipment to Ultimate Consignee and Purchaser locations in the United States.

※This product is subject to US export licensing requirements. Exports without an export license or other applicable authorization to most countries is prohibited by law.

TNM-3620TDY		
VIDEO	THERMAL	VISIBLE
Imaging Device	Uncooled micro bolometer	1/2.8" 2MP CMOS
Effective Pixels	320(H) x 240(V)	1945(H) x 1109(V)
NETD	< 60mK	-
Pixel Size	12 μm	-
Minimum Illumination	-	Color : 0.05 lux (F1.6, 1/30sec) B/W : 0.005 lux (F1.6, 1/30sec)
Video Out	CVBS : 1.0 Vp-p / 75 Ω composite, 720 x 480 for installation USB : Micro USB Type B, 1280 x 720 for installation	

LENS		
Focal Length	4.7mm fixed focal	4mm fixed focal
Maximum Aperture Ratio	F1.0	F1.6
Angular Field of View	H : 50.0°, V : 36.4°, D : 65.3°	H : 87.6°, V : 46.4°, D : 104.5°
Minimum Object Distance	1m (3.28ft)	-
Focus Control	Fixed	Fixed

OPERATIONAL		
Camera Title	Displayed up to 85 characters	
Day & Night	-	Auto (ICR)
Backlight Compensation	-	BLC, WDR, SSSDR
Wide Dynamic Range	-	ExtremeWDR (150dB)
Digital Noise Reduction	-	SSNRV
Digital Image Stabilization	Support (built-in gyro sensor)	
Motion Detection	8ea, 8point polygonal zones	
Privacy Masking	32ea, polygonal zones / - Color: Grey/Green/Red/Blue/Black/White / Mosaic	
Gain Control	-	Low / Middle / High
White Balance	-	ATW / AWC / Manual / Indoor / Outdoor
LDC	-	Support
Electronic Shutter Speed	-	Minimum / Maximum / Anti flicker (2~1/12,000sec)
Video Rotation	Flip, Mirror, applied to both channels	
Analytics	Normal mode : Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection, Temperature detection EBT mode : Temperature detection, Blackbody error	
Alarm I/O	Input 1ea / Output 2ea	
Alarm Triggers	Analytics, Network disconnect, Alarm input	
Alarm Events	File upload via FTP and e-mail / Notification via e-mail / SD/SDHC/SDXC or NAS recording at event triggers / Alarm output / Handover (Normal mode only) / Audio playback / Beep alarm (EBT mode only)	
Audio In	Selectable (microphone in/line in) Supply voltage : 2.5VDC(4mA), Input impedance : 2K Ohm	
Audio Out	Line out, Maximum output level : 1Vrms	
Color Palettes	Estimated Body Temperature Mode (Thermal Face detection) : Whitehot Estimated Body Temperature Mode (Visible Face detection) & Normal mode : Whitehot, Blackhot, Rainbow, Rainbow2, Sepia, Red, Iron, Custom	-

RADIOMETRY		
Temperature detection range	Estimated Body Temperature Mode : 30°~45°C (86°F~113°F) Normal mode : -20°~+130°C (-4°F~+266°F)	-
Temperature accuracy	Estimated Body Temperature Mode : $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) / $\pm 0.3^{\circ}\text{C}$ ($\pm 0.54^{\circ}\text{F}$) with blackbody Normal mode : -20°C~130°C (-4°F~266°F) / $\pm 5^{\circ}\text{C}$ $\leq 100^{\circ}\text{C}$, $\pm 20\%$ $> 100^{\circ}\text{C}$ ($\pm 9^{\circ}\text{F}$ $\leq 212^{\circ}\text{F}$, $\pm 20\%$ $> 212^{\circ}\text{F}$)	-

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Dual-Sensor Camera with AI Face and Body Temperature detection



Key Features

- Dual sensor camera with QVGA thermal & 2MP visible video outputs
- Built-in 4.7mm fixed lens (thermal), 4mm fixed lens (visible)
- AI Face & temperature detection analytics including temperature & face overlay and alerts, detects people even while wearing a mask
- Estimated Body Temperature Mode: +30°C~+45°C (+86°F~+113°F) / ±0.5°C (±0.9°F), ±0.3°C (±0.54°F) with blackbody
- Normal Radiometric mode: -20°C~+130°C (-4°F~+266°F) / ±5°C(≤+100°C), ±20%(>+100°C) ±9°F(≤+212°F), ±20%(>+212°F)
- Micro SD/SDHC/SDXC memory slot (Maximum 256GB)
- Integration of visible camera face detection with thermal camera Elevated Body Detection
- PoE+, 12VDC powered

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		TNM-3620TDY	
		THERMAL	VISIBLE
RADIOMETRY			
Temperature detection		3ea rectangular (Normal Mode)	-
Additional		Hybrid palettes (Normal mode), Spot temperature reading (Normal mode)	-
NETWORK			
Ethernet		RJ-45(10/100BASE-T)	
Video Compression		H.265 / H.264 : Main / Baseline / High, MJPEG	
Resolution		Stretched: 1280x960, 640x480 Native: 320 x 240	1920 x 1080, 1280x1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240
Maximum Framerate		H.265/H.264: 30fps MJPEG : 30fps	H.265/H.264 : 60fps MJPEG : 30fps
Smart Codec		WiseStream II	Manual(3ea area), WiseStream II
Video Quality Adjustment		H.264/H.265 : Target bitrate level control, MJPEG : Target bitrate level control	
Bitrate Control		H.264/H.265 : CBR or VBR, MJPEG : VBR	
Streaming		Unicast (20 users) / Multicast Multiple streaming (Up to 6 profiles)	
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	
Protocol		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, PIM-SM, UPnP, Bonjour, LLDP	
Security		HTTPS(SSL) login authentication / Digest login authentication / IP address filtering User access log / 802.1X authentication (EAP-TLS, EAP-LEAP) Device certificate (Hanwha Techwin Root CA)	
Edge Storage		Micro SD/SDHC/SDXC slot, maximum 256GB, record 1 / 2 sensors	
Application Programming Interface		ONVIF Profile S/T, SUNAPI(HTTP API)	
Webpage Language		English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek	
Web Viewer		Supported OS: Windows 10, Mac OS X 10.13 or later Recommended Browser: Google Chrome Supported Browser: MS Edge, Mozilla Firefox (Windows 64-bit only), Apple Safari (Mac OS X only)	
Memory		4608MB RAM, 512MB Flash	
ENVIRONMENTAL			
Operating Temperature / Humidity		Estimated Body Temperature Mode : +10°C~+35°C(+50°F~+95°F) / Less than 95% RH Normal mode : -10°C~+55°C(+14°F~+131°F) / Less than 95% RH	
Storage Temperature / Humidity		-30°C~+60°C (-22°F~+140°F) / Less than 95% RH	
Certification		-	
ELECTRICAL			
Input Voltage		PoE+ (IEEE802.3at, Class4), 12VDC	
Power Consumption		PoE+ : Maximum 17.0W, typical 12.5W 12VDC: Maximum 14.5W, typical 11.0W	
MECHANICAL			
Color / Material		White / Aluminum	
RAL Code		RAL9003	
Product dimensions / Weight / Mounting		135 x 75 x 188.5mm (5.31" x 2.95" x 7.42") 1.7kg (3.77lb) 1/4 - 20 UNC top & bottom	

* The latest product information / specific tion can be found at hanwhasecurity.com
* Design and specific tions are subject to change without notice.