

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 face and temperature detection using 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

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, SDR
Wide Dynamic Range	-	150dB
Digital Noise Reduction	-	SSNRV
Digital Image Stabilization	Support (built-in gyro sensor)	
Motion Detection	8ea, 8point polygonal zones (TBD)	
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	
Analytics <small>(*In EBT mode, only temperature detection event is available)</small>	Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, AI Temperature detection (High/Low Body Temperature, Face), Shock detection	
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 API, e-mail / SD/SDHC/SDXC or NAS recording at event triggers / Alarm output / Handover / Buzzer	
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 : White hot, Rainbow Normal mode : Whitehot, Black hot, Rainbow, Rainbow 2, Sepia, Red, Iron, Custom	-
RADIOMETRY		
Temperature detection range	Estimated Body Temperature Mode : $+30^{\circ}\text{C}\sim+45^{\circ}\text{C}$ ($+86^{\circ}\text{F}\sim+113^{\circ}\text{F}$) / Normal mode : $-20^{\circ}\text{C}\sim+130^{\circ}\text{C}$ ($-4^{\circ}\text{F}\sim+266^{\circ}\text{F}$)	-
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 : $\pm 5^{\circ}\text{C}$ ($\leq 100^{\circ}\text{C}$), $\pm 20\%$ ($> 100^{\circ}\text{C}$), $\pm 9^{\circ}\text{F}$ ($\leq +212^{\circ}\text{F}$), $\pm 20\%$ ($> +212^{\circ}\text{F}$)	-

TNM-3620TDY

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 512GB)
- Integration of visible camera face detection with thermal camera Elevated Body Detection
- PoE+, 12VDC powered

		TNM-3620TDY	
		THERMAL	VISIBLE
RADIOMETRY			
Temperature detection		3ea rectangular (Normal Mode)	-
Additional		Hybrid palettes, Spot temperature reading, Estimated Body Temperature	-
NETWORK			
Ethernet		RJ-45(10/100BASE-T)	
Video Compression		H.265 / H.264 : Main / Baseline / High, MJPEG	
Resolution		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		Manual(5ea 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) (TBD)	
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	
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 512GB, record 1 / 2 sensors	
Application Programming Interface		ONVIF Profile S/G/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 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Recommended Browser: Google Chrome Supported Browser: MS Internet Explorer 11, MS Edge, Mozilla Firefox (Windows 64-bit only), Apple Safari (Mac OS X only)	
Memory		1024MB RAM, 256MB Flash (TBD)	
ENVIRONMENTAL			
Operating Temperature / Humidity		Estimated Body Temperature Mode : +10°C~+35°C(+50°F~+95°F) / Less than 95% RH Normal mode : -10°C~+60°C(+14°F~+140°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)(TBD), 12VDC	
Power Consumption		PoE+ : Max. (TBD)W, typical (TBD)W 12VDC: Max. (TBD)W, typical (TBD)W	
MECHANICAL			
Color / Material		TBD / Aluminum (TBD)	
RAL Code		(TBD)	
Product dimensions / Weight / Mounting		135 x 75 x 180mm (TBD) (5.31" x 2.95" x 7.09") 1/4 - 20 UNC top & bottom	

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