



Network

Thermal

TNO-4041T

VGA H.265 Thermal Camera











#### **Key Features**

- Max. 640 x 480 resolution support
- Built-in 19mm fixed lens
- H.265, H.264, MJPEG codec
- Max. 30fps@all resolutions (H.265, H.264, MJPEG)
- Motion detection, Handover, Tampering, Loitering
- Directional detection, Audio detection, Sound classification
- Shock detection, Temperature change detection
- SD / SDHC / SDXC memory slot (Max. 256GB)
- WiseStreamII support
- PoE, 24V AC, 12V DC
- IP66, NEMA4X, IK10

 $\divideontimes$  Bridge firmware is required to upgrade from 1.00~1.2X versions to the latest version. For more details, please refer to the [UPGRADE NOTIFICATION] or [Release Note] included with your firmware (ZIP file).



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#### **Specifications**

Video		
Imaging Device	Туре	Uncooled micro bolometer (640x480)
Resolution		640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps
Spectral Range		8~14 <i>µ</i> m
NETD		≤50mK
Pixel Size		17µm
Video Out		CVBS: 1.0 Vp-p / $75\Omega$ composite for installation, USB: Micro USB Type B
Lens		
Focal Length (mm)		19
Max Aperture Ratio (F number)	Wide	1.0
Angular Field of View	Horizontal	32°
	Vertical	24.3°
	Diagonal	39.2°
iFoV		0.895mRad
Min. Object Distance		11m(36.09ft)
Focus Control		Fixed
Operational		
Digital Image Stabilization		Support(built-in gyro sensor)
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	Polygonal zones
	Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic
Video Rotation		Flip, Mirror, Hallway view(90°/270°)
Alarm Interface	In/Out	Input 1ea, Output 2ea

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com Hanwha Vision is formerly known as Hanwha Techwin.

# $T_{\text{series}}_{\text{TNO-4041T}}$



Operational		
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
Audio In		Selectable(mic in/line in)
Audio Out		Line out
Color Pallettes		Whitehot, Blackhot, Rainbow, Sepia, Red, Iron
Analytics		
Analytics Events	Normal	Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Lotering, Intrusion, Enter/Exit, Appear/Disappear), Virtual line(Crossing, Direction), Temperature change detection
Network		
Ethernet		RJ-45(10/100BASE-T)
Video Compression		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		Manual, WiseStream II
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 20 users
	Multicast	Support
	Multiple Streaming	Up to 10 profiles
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 UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast)
Application	ONVIF	S, G, T
Programming Interface	Others	SUNAPI (HTTP API), Hanwha Vision Open Platform
Security		
User authentication		Digest authentication
Network authentication		IEEE 802.1X(EAP-TLS, EAP-LEAP)
Secure Communication		HTTPS, WSS(WebSocket Secure), SRTP
Access Control		IP-based access control
Audit		Access / System / Event Log management
General		
Memory	RAM	1GB
	Flash	256MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 1slot

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Environmental & Electrical				
Operating Condition	Temperature	-40°C~+60°C(-40°F~+140°F)		
	Humidity	0~90% RH(non-condensing)		
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)		
	Humidity	0~90% RH(non-condensing)		
Input Voltage		PoE(IEEE802.3af, Class3), 24VAC, 12VDC		
Power Consumption	PoE	Max. 10W, typical 8.6W		
	12VDC	Max. 9W, typical 7.5W		
	24VAC	Max. 10.5W, typical 8.9W		
Mechanical				
Color		White		
Material		Aluminum		
RAL Code		RAL9003		
Product Dimensions		ø101.97x309mm(4.01x12.17")		
Product Weight		2452g(5.41lb)		
Certifications & S	tandards	<del></del>		
Environment		IEC 60529 IP66, IEC 62262 IK10, NEMA 250 type 4X		

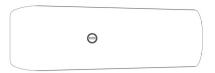


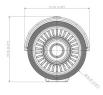
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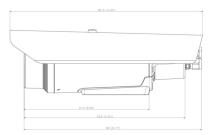
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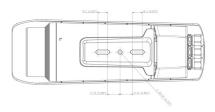
CAD Unit: mm [inch]











Apperance TNO-4041T Unit: mm [inch]