## Tseries TNO-3010T







## TNO-3010T

**QVGA Thermal Camera** 









#### **Key Features**

- Max. 320 x 240 resolution support
- Built-in 2.7mm fixed lens
- H.265, H.264, MJPEG codec
- Max. 30fps@all resolutions (H.265, H.264, MJPEG)
- $\bullet \ \, \text{Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering,} \\$ Tampering, Virtual line, Audio detection, Sound classification Temperature detection, Shock detection
- Micro SD / SDHC / SDXC memory slot (Max. 256GB)
- Hallway View, WiseStreamII support
- PoE, 24VAC, 12VDC / IP66, NEMA4X, IK10

#### **Compatible Devices**



SBP-303PM

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#### **QVGA Thermal Camera**



#### **Specifications**

Video		
Imaging Device	Туре	Uncooled micro bolometer (320x240)
Resolution		320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps
Spectral Range		8~14μm
NETD		≤60mK
Pixel Size		12 <i>µ</i> m
Video Out		CVBS: 1.0 Vp-p / $75\Omega$ composite for installation, USB: Micro USB Type B
Lens		
Focal Length (mm)		2.7
Max Aperture Ratio (F number)	Wide	1.0
Angular Field of View	Horizontal	92.0°
	Vertical	65.5°
	Diagonal	125.7°
iFoV		5.02 mRad
Min. Object Distance		0.3m(0.98ft)
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.

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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, Rainbow2, Sepia, Red, Iron, Custom
Analytics		
Analytics Events	Normal	Motion detection, Tampering, Sound classification, Shock detection, Virtual area(Lotering, Intrusion, Enter/Exit, Appear/Disappear), Virtual line(Crossing, Direction), Temperature 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), PIM-SM
Application Programming Interface	ONVIF	S, G, T
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Security		
OS / Firmware Protect		Encrypted firmware
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
Data Protect		Encryption credentials
Audit		Access / System / Event Log management
Device ID		Device certificate(Hanwha Vision Root CA)

# $T_{\text{series}}$ TNO-3010T



General		
Memory	RAM	1GB
	Flash	256MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 1slot
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. 8.7W, typical 7.5W
	12VDC	Max. 7.8W, typical 6.7W
	24VAC	Max. 9.2W, typical 8.0W
Mechanical		
Color		White
Material		Aluminum
RAL Code		RAL9003
Product Dimensions		ø147.51x375.3mm(5.81x14.78")
Product Weight		2512g(5.538lb)
Certifications & S	tandards	
Environment		IEC 60529 IP66, IEC 62262 IK10, NEMA 250 type 4X

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CAD Unit: mm [inch]

