



Network

Bullet

TNO-L4040T

VGA Thermal Camera



Key Features

- Max. 640x480 resolution support
- Built-in 19mm fixed focal lens
- H.265, H.264, MJPEG codec
- Max. 8fps@all resolutions (H.265, H.264, MJPEG)
- Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Temperature detection, Sound classification, Shock detection
- Micro SD / SDHC / SDXC memory 1-slot (Max. 256GB)
- Hallway View, WiseStreamII support
- PoE, 24VAC, 12VDC / IP66, IK10, NEMA4X

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VGA Thermal Camera



Specifications

| | |
|-----------------------------|--|
| Video | |
| Imaging Device | Uncooled micro bolometer |
| Resolution | 640x480, 640x360, 320x240 |
| Max. Framerate | H.265/H.264/MJPEG: Max. 8fps |
| NETD | <50mK |
| Pixel Size | 17μm |
| Video Out | CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation |
| Lens | |
| Focal Length (Zoom Ratio) | 19mm fixed focal |
| Max. Aperture Ratio | F1.0 |
| Angular Field of View | H: 32° / V: 24.3° / D: 39.2° |
| Min. Object Distance | 11m(36.09ft) |
| Focus Control | Fixed |
| Operational | |
| Camera Title | Displayed up to 85 characters |
| Digital Image Stabilization | Support(built-in gyro sensor) |
| Motion Detection | 8ea, 8point polygonal zones |
| Privacy Masking | 24ea, polygonal zones - Color: Grey/Green/Red/Blue/Black/White - Mosaic |
| Video Rotation | Flip, Mirror, Hallway view(90-/270-) |
| Analytics | Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Temperature detection, Sound classification, Shock detection |
| Alarm I/O | Input 1ea / Output 2ea |
| Alarm Triggers | Analytics, Network disconnect, Alarm input, MQTT subscription |
| 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 - MQTT: publication |
| Audio In | Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm |
| Audio Out | Line out, Max.output level: 1Vrms |
| Color Palettes | Whitehot, Blackhot, Rainbow, Rainbow2, Sepia, Red, Iron, Custom |
| Network | |
| Ethernet | RJ-45(10/100BASE-T) |
| Video Compression | H.265/H.264: Main/Baseline/High, MJPEG |

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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|-----------------------------------|--|
| 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(5ea area), WiseStream II |
| Bitrate Control | H.264/H.265: CBR or VBR MJPEG: VBR |
| Streaming | Unicast(20 users) / Multicast 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, PIM-SM, UPnP, Bonjour, LLDP, SRTP, MQTT |
| Application Programming Interface | ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform |

Security

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|------------------------|---|
| OS / Firmware Protect | Firmware encryption |
| User authentication | Digest Authentication, Prevent brute-force attack |
| Network authentication | 802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2) |
| Secure Communication | HTTPS, SRTP, WSS(Websocket secure) |
| Access Control | Access control based on IP address |
| Data Protect | Authentication information encryption, ZIP compression encryption |
| Audit | User Access/System/Event log management |
| Device ID | Device Certificate(Hanwha Private Root CA) |

General

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|------------------|--|
| Webpage Language | English, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek |
| Edge Storage | Micro SD/SDHC/SDXC 1slot 256GB |
| Memory | 1024MB RAM, 256MB Flash |

Environmental & Electrical

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|----------------------------------|--|
| Operating Temperature / Humidity | -40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH |
| Storage Temperature / Humidity | -50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH |
| Certification | IP66, IK10, NEMA4X |
| 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 / Material | White / Aluminum |
| RAL Code | RAL9003 |
| Product Dimensions / Weight | ø101.97x401.8mm(4.01x15.82") / 3,124g(6.89lb) |

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CAD

Unit:mm [inch]

