# TNM-3620TDY

Temperature detection thermal camera

## Benefits

- IEC 60601 certificated Temperature Detection Thermal camera.

- FDA* 510(k) clearance (In progress).

- Dual purpose camera equipped with QVGA thermal imaging and high definition cameras, to help businesses operate safely during the COVID-19 era.

  - EBT (Estimated Body Temperature mode). Able to accurately measure a persons temperature for a reliable and safe way to scan for fevers. Accuracy is further increased with Blackbody accessory.

  - In Radiometric mode, the camera can measure changes in temperature with a high degree of accuracy, which will alert them to the threat of a fire in recycling, waste management and landfill type facilities.

  - The camera can be used to monitor the temperate of specific areas or objects in a scene.

  - Valuable equipment could be saved before it overheats.

- When the camera is no longer required for COVID-19, Radiometric mode can be used, making the camera a long-term investment.

- The 2 megapixel camera features Intelligent Video Analytics including directional detection, motion detection, enter/exit, virtual line, audio detection and tampering detection (These features are only in Normal mode, see table for more detail).

- Ability to connect external devices, such as a traffic light probe to indicate if there is a positive detection of high temperature.
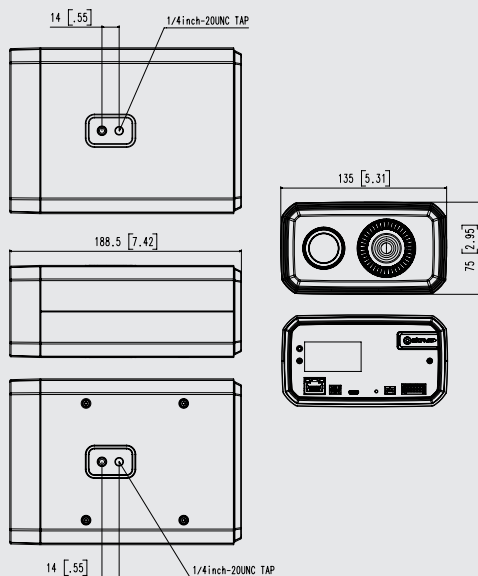
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| TNM-3620TDY | |
|---|---|
| **VIDEO** | |
| Imaging Device | Uncooled micro bolometer (320x240) |
| Visual Lens Resolution | 2Mpix (1920x1080) |
| Thermal Lens Resolution | 1280x960*, 640x480*, 320x240<br>*resized from 320x240 |
| Max. Framerate | H.265/H.264: Max. 30fps/25fps(60Hz/50Hz)<br>MJPEG: Max. 30fps/25fps(60Hz/50Hz) |
| NETD | < 60mK |
| Pixel Size | 12$\mu m$ |
| Video Out | CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P)<br>for installation<br>USB : Micro USB Type B, 1280x720 for installation |
| **LENS** | |
| Focal Length (Zoom Ratio) | 4.7mm fixed focal |
| Max. Aperture Ratio | F1.0 |
| Angular Field of View | H: 50.0˚, V: 36.4˚, D: 65.3˚ |
| Min. Object Distance | 1m(3.28ft) |
| 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 | 32ea, polygonal zones<br> - Colour: Grey/Green/Red/Blue/Black/White<br> - Mosaic |
| Video Rotation | Flip, Mirror |
| Analytics | EBT mode : Temperature detection, Blackbody error<br>Normal mode : Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection, Temperature detection<br>*EBT : Estimated Body Temperature |
| Alarm I/O | Input 1ea / Output 2ea |
| Alarm Triggers | Analytics, Network disconnect, Alarm input |
| Alarm Events | File upload via FTP and e-mail<br>Notification via e-mail<br>SD/SDHC/SDXC or NAS recording at event triggers<br>Alarm output<br>Handover (normal mode only)<br>Audio playback<br>Beep alarm (EBT mode only) |
| Audio In | Selectable(mic in/line in)<br>Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm |
| Audio Out | Line out, Max.output level: 1Vrms |
| Color Palettes | EBT Mode (thermal face detection)<br>: Whitehot<br>EBT (visible face detection) & Normal mode<br>: Whitehot, Blackhot, Rainbow, Rainbow2, Sepia, Red, Iron, Custom |
| **RADIOMETRY** | |
| Temperature detect range | Estimated body temperature mode<br>30~45°C(86°F~113°F)<br>Normal mode<br>-20~+130°C(-4˚F~+266˚F) |
| Temperature accuracy | Estimated body temperature mode<br>±0.5°C(±0.3°C with Blackbody)<br>Normal mode<br>±5˚C(≤100˚C), ±20%(>100˚C) |
| Temperature detection | 3ea rectanguler (normal mode) |
| Additional | Hybrid palettes (normal mode),<br>Spot temperature reading (normal mode) |

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## Key Features

- Bi-spectrum : QVGA thermal & 2MP visible sensor

- Built-in 4.7mm fixed lens (thermal), 4mm fixed lens (visible)

- Two temperature detection modes - Estimated Body Temperature Mode : 30~45℃ (86~113°F) / ±0.5℃ (±0.3℃ with blackbody) - Normal Radiometric mode : -20~130℃ (-4~266°F) / ±5˚C(≤100˚C), ±20%(>100˚C)

- AI based face and temperature detection analytics

- MicroSD 1slot

- PoE+/12VDC

## Dimensions

Unit:mm(inch)



| TNM-3620TDY | |
|---|---|
| **NETWORK** | |
| Ethernet | Metal shielded RJ-45(10/100BASE-T), RJ-45(10/100BASE-T) |
| Video Compression | H.265/H.264: Main/Baseline/High, MJPEG |
| Audio Compression | G.711 u-law /G.726 Selectable<br>G.726(ADPCM) 8KHz, G.711 8KHz<br>G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps<br>AAC-LC: 48Kbps at 16KHz |
| Smart Codec | WiseStreamII |
| Bitrate Control | H.264/H.265: CBR or VBR<br>MJPEG: VBR |
| Streaming | Unicast(20 users) / Multicast<br>Multiple streaming(Up to 6 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 |
| Security | HTTPS(SSL) login authentication<br>Digest login authentication<br>IP address filtering<br>User access log<br>802.1X authentication(EAP-TLS, EAP-LEAP)<br>Device certificate(Hanwha Techwin Root CA) |
| Application Programming Interface | ONVIF Profile S/T<br>SUNAPI(HTTP API) |
| **GENERAL** | |
| Webpage Language | English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek |
| Edge Storage | Micro SD/SDHC/SDXC 1slot 256GB |
| Memory | 4608MB RAM, 512MB Flash |
| **ENVIRONMENTAL & ELECTRICAL** | |
| Operating Temperature / Humidity | EBT mode<br>: +10℃~+35℃(+50°F~+95°F) / Less than 95% RH<br>Normal mode<br>: -10℃~+55℃(+14°F~+131°F) / Less than 95% RH |
| Storage Temperature / Humidity | -30℃~+60℃(-22°F~+140°F) / Less than 95% RH |
| Input Voltage | PoE+(IEEE802.3at, Class4), 12VDC |
| Power Consumption | PoE+: Max. 17.0W, typical 12.5W<br>12VDC: Max. 14.5W, typical 11.0W |
| **MECHANICAL** | |
| Colour / Material | White / Aluminum |
| RAL Code | RAL9003 |
| Product dimensions / weight | 135(W)x75(H)x188.5(D)mm, (5.31x2.95x7.42"), 1.7kg(3.77lb) |

* Blackbody accessory available separately for even more accurate temperature detection
* The latest product information / specification can be found at hanwha-security.eu
* Wisenet is the proprietary brand of Hanwha Techwin.
* FDA* 510(k) clearance (In progress)
    * Hanwha Techwin facility registration is completed.
    * Device registration is in progress.
        * Product code LHQ / Estimated compete date : 1Q. 2021

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