



Network

Bullet

## TNO-4050T

VGA H.265 Thermal Camera



### Key Features

- Max. 640 x 480 resolution support
- Built-in 35mm 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)
- Hallway View, WiseStreamII support
- PoE, 24V AC, 12V DC
- IP66, NEMA4X

※ 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).

### Compatible Accessories (Optional)



SBP-303PM

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## Specifications

### Video

<b>Imaging Device</b>	Uncooled micro bolometer
<b>Resolution</b>	640x480, 640x360, 320x240
<b>Max. Framerate</b>	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(60Hz/50Hz)
<b>NETD</b>	<50mK
<b>Pixel Size</b>	17µm
<b>Video Out</b>	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation

### Lens

<b>Focal Length (Zoom Ratio)</b>	35mm fixed focal
<b>Max. Aperture Ratio</b>	F1.0
<b>Angular Field of View</b>	H: 17.2° / V: 13° / D: 22°
<b>Min. Object Distance</b>	36m(118.11ft)
<b>Focus Control</b>	Fixed

### Operational

<b>Camera Title</b>	Displayed up to 85 characters
<b>Digital Image Stabilization</b>	Support(built-in gyro sensor)
<b>Motion Detection</b>	8ea, 8point polygonal zones
<b>Privacy Masking</b>	32ea, polygonal zones - Color: Grey/Green/Red/Blue/Black/White - Mosaic
<b>Video Rotation</b>	Flip, Mirror, Hallway view(90°/270°)
<b>Analytics</b>	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Temperature detection, Sound classification, Shock detection
<b>Alarm I/O</b>	Input 1ea / Output 2ea
<b>Alarm Triggers</b>	Analytics, Network disconnect, Alarm input
<b>Alarm Events</b>	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output Handover
<b>Audio In</b>	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
<b>Audio Out</b>	Line out, Max.output level: 1Vrms
<b>Color Palettes</b>	Whitehot, Blackhot, Rainbow, Sepia, Red, Iron, Wisenet

### Network

<b>Ethernet</b>	RJ-45(10/100BASE-T)
<b>Video Compression</b>	H.265/H.264: Main/Baseline/High, MJPEG
<b>Audio Compression</b>	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
<b>Smart Codec</b>	Manual(5ea area), WiseStream II
<b>Bitrate Control</b>	H.264/H.265: CBR or VBR MJPEG: VBR

<b>Streaming</b>	Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles)
<b>Protocol</b>	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, SRTSP
<b>Security</b>	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP)
<b>Application Programming Interface</b>	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform

## General

<b>Web Viewer</b>	Supported OS: Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Recommended Browser: Google Chrome Supported Browser: MS Explore11, MS Edge, Mozilla Firefox(Window 64bit only), Apple Safari(Mac OS X only)
<b>Edge Storage</b>	Micro SD/SDHC/SDXC 1slot 256GB
<b>Memory</b>	1024MB RAM, 256MB Flash

## Environmental & Electrical

<b>Operating Temperature / Humidity</b>	-40°C ~ +60°C (-40°F ~ +140°F) / 90% RH 이하
<b>Storage Temperature / Humidity</b>	-50°C ~ +60°C (-58°F ~ +140°F) / 90% RH 이하
<b>Certification</b>	IP66, NEMA4X
<b>Input Voltage</b>	PoE(IEEE802.3af, Class3), 24VAC, 12VDC
<b>Power Consumption</b>	PoE: Max. 10W, typical 8.6W 12VDC: Max. 9W, typical 7.5W 24VAC: Max. 10.5W, typical 8.9W

## Mechanical

<b>Color / Material</b>	White / Aluminum
<b>RAL Code</b>	RAL9003
<b>Product Dimensions / Weight</b>	Φ101.97x401.8mm(4.01x15.82") / 3175g(7.01 lb)

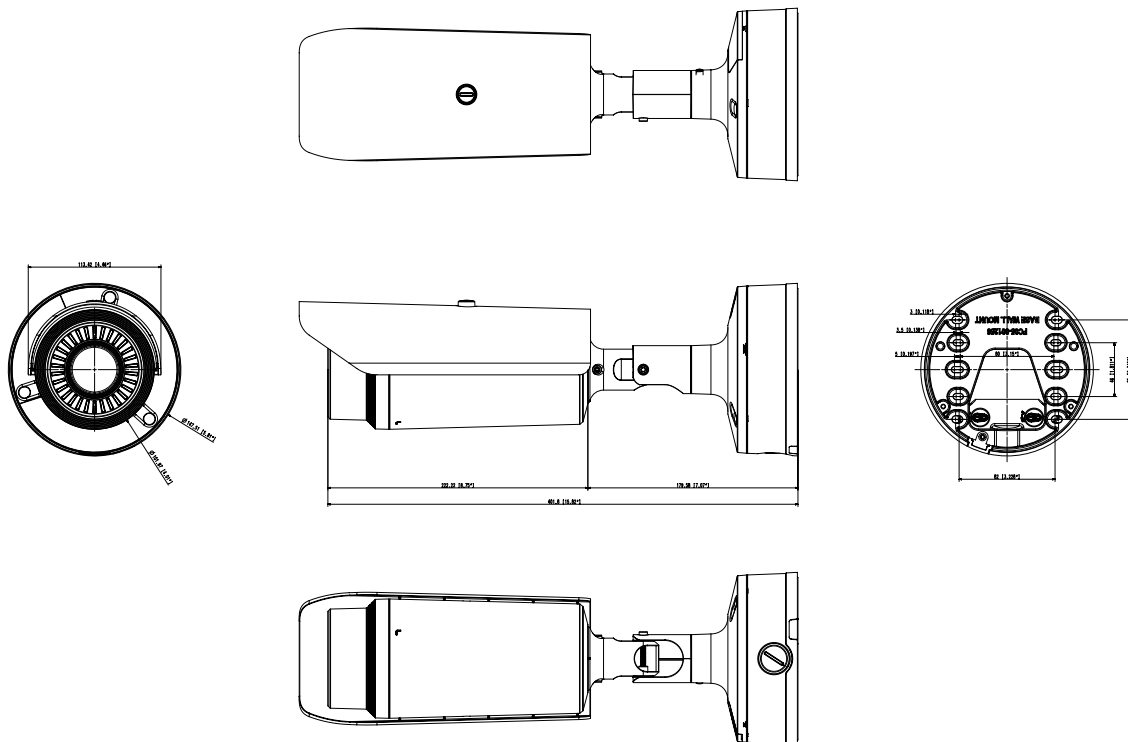
# TNO-4050T

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CAD

Unit: mm [inch]



Apperance TNO-4050T  
Unit : mm [inch]