

Network Thermal

TNU-4051T

VGA Thermal Positioning Camera

Key Features

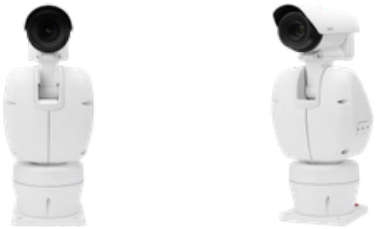
- High-resolution thermal VGA (640 x 480) resolution
- Built-in 35mm fixed lens
- 360° endless panning
- 30fps@all resolutions(H.265, H.264, MJPEG)
- H.265, H.264, MJPEG triple codec support
- WiseStream II support
- Tampering, Loitering, Directional / Virtual Fence Line detection, Enter/ Exit, (Dis) Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection
- 2-way bi-directional audio & Alarm I/O support
- SD / SDHC / SDXC memory slot (Maximum 256GB)
- Operating temperature -40°F ~ +140°F
- 24V AC, 12V DC / IP66, NEMA4X

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Specifications

Video

Imaging Device	Type	Uncooled micro bolometer (640x480)
Resolution		640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps
Spectral Range		8~14㎛
NETD		≤50mK
Pixel Size		17㎛
Video Out		CVBS: 1.0 Vp-p / 75Ω composite for installation

Lens

Focal Length (mm)		35
Max Aperture Ratio (F number)	Wide	1.0
Angular Field of View	Horizontal	17.2°
	Vertical	13°
	Diagonal	22°
iFoV		0.47mRad
Min. Object Distance		36m(118.11ft)
Focus Control		Fixed

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	360° Endless
	Tilt	-90°~40°
	Others	None, None
Pan Speed	Preset	Max. 120°/sec
	Manual	0.025°/sec~120°/sec
Tilt Speed	Preset	Max. 40°/sec
	Manual	0.025°/sec~40°/sec
Sequence		Preset(300ea), Preset(300ea), Group(6ea), Group(6ea)
Preset Accuracy		±0.3°

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Operational

Direction Indicator		Support
Digital Image Stabilization		Support(built-in gyro sensor)
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Alarm Interface	In/Out	Input 1ea, Output 1ea
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, 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: Main, 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		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, IGMPv2, 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

User authentication	Digest authentication
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP)
Secure Communication	HTTPS
Access Control	IP-based access control

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Security

Audit		Access / System / Event Log management

General

Memory	RAM	1GB
	Flash	256MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 1slot

Environmental & Electrical

Operating Condition	Temperature	-40°C~+55°C(-40°F~+131°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		24VAC
Power Consumption	24VAC	Max. 84W(Heater on), 62W(Heater off)

Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	219(W)×528(H)×335(D)mm(8.62x20.79x13.19")
Product Weight	11.7kg(25.79lb)

Certifications & Standards

Environment	IEC 60529 IP66, NEMA 250 type 4X

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CAD

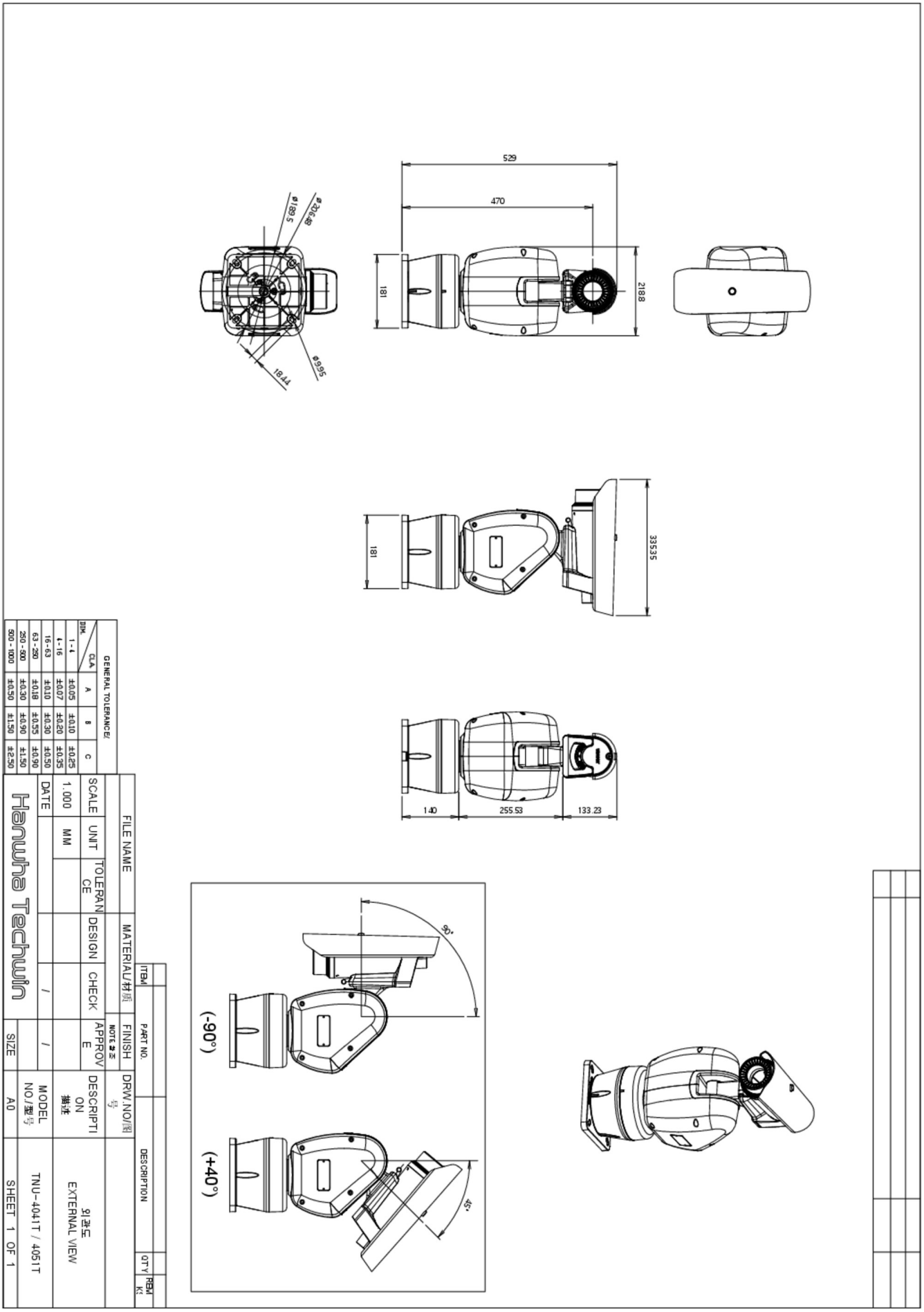
Unit: mm [inch]

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