

Single sensor LWIR PTZ camera



Compact THC6 Single Sensor LWIR PTZ Series

THC6 series PTZ is a compact single sensor LWIR system, to paired with short-mid distance thermal lenses from 13mm. to 55mm., especially designed for vehicles and other limited space installations or where a discrete size system is required.

A high precision and heavy-duty worm gear pan-tilt system, able to work 24/7 without any maintenance for many years. Making THC6 compact PT an unparalleled performance model to be installed in homeland security or other critical infrastructures.

Integrated into an anti-corrosive stainless-steel or aluminum heavy-duty housing. THC6 is perfect for seaport and harsh environment installations, encapsulated into an IP66 housing and including fans/heaters to work in high and low temperature weather.

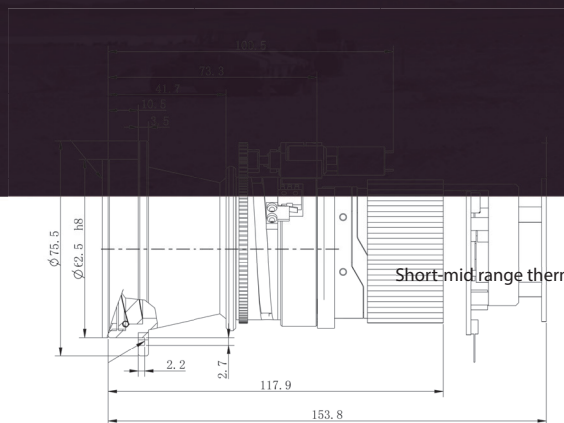
Key features:

- HD Thermal resolution in 640x512 or 1280x1024 pixels
- High performance NETD thermal Vox sensors with 12µm. pixel
- Fixed thermal lens up to 55mm.
- Real time video
- On-board or advanced video analytics
- High precision motor technology, accurate pan/tilt 0,01°
- Worm drive engine with long lasting / high repeatability
- High speed azimuth with -90/90° elevation
- 24v. DC power
- IP66 waterproof housing
- High / Low temperature ready
- Heater, fan
- SUS316 Stainless steel or aluminum casting
- Military connectors
- Onvif 2.5 and Profile S



Specifications:

Model	THC6 Series					
THERMAL CAMERA	Type	Single sensor compact PTZ camera				
	Sensor	LWIR, uncooled Vox micro-bolometer				
	Wavelength	8-14μm.				
	NETD	<35mK@f/1,0 50Hz., 300K				
	Pixel pitch	12μm.				
	Resolutions	640x512				
	Display resolution	Up to 1280x1024				
	Color palette	10 colors				
	Image enhancement	Yes				
	Frames/second	25/30fps.				
	Focal length	13mm.	19mm.	25mm.	35mm.	55mm.
	HFOV	32,9°	22,9°	17,5°	13°	8°
	f. number	1.0	1.0	1.0	1.0	1.0
	Focus	Athermal fix lenses				
	Video compression	H.265, H.264, Mjpeg				
	Streams	Triple stream				
	Bitrate	256-6144Kbps. / 1536-7424Kbps. , VBR/CBR				
	Image settings	Contrast, Brightness, Mirror, Flip, sharpness, Image Enhancement, NR 2/3D				
	Motion detection/ROI	Yes				
	Standard analytics	Yes				
	Advanced video analysis	Tripwire, Cross Fence detection, Intrusion, Loitering detection				
	Fire detection	Yes				
GENERAL	Video output	Digital				
	Local storage	Up to 256Gb.				
	Web browser	IE8 or above, Chrome, Edge, Firefox				
	Pan/tilt movement	Pan 360° endless, tilt -90/90°				
	Pan/tilt speed	0.01°-80°/Sec. - 0.01°-40°/Sec.*				
	Accuracy	±0,01°				
	Presets	256				
	Tours	8				
	Auto scan / Auto pan	Yes				
	Patterns	5 (10min.)				
	Groups	4				
	Idle action / Start up	Yes				
	Protocols	Pelco D				
	Digital alarms	Motion detection, IVS alarms, memory full				
	Alarm I/O	1/1				
	RS485	Yes				
	Serial baudrate	9600 Kbps.				
	Connector	Military type				
	Network	RJ45 1x10/100 Ethernet				



GENERAL	Network protocols	IPv4/v6, RTSP/RTP/RTCP, TCP/UDP, HTTP, HTTPS, DHCP, DNS, FTP, DDNS, PPPoE, SMTP, SNMP V1/V2, IEEE802.X, Bonjour, IP filter, QoS, ICMP, IGMP, NTP
	Fan/Heater	Yes
	Platform	Onvif 2.5, Profile S
	Environmental	-32°/55°C. - 0/95% RH not condensing
	Power	24v.DC
	GE window	Yes
	Waterproof	IP66
	Weight	14Kg. without cameras / 5,8Kg. in aluminum
	Size	305x218xmm.

Thermal - DRI Distances

Human target 1,8x0,5m.	Johnson´s criteria - NATO standard - 13mm. focal length	
Detection		542m.
Recognition	135m.	
Identification	68m.	

Vehicle target 2,3x2,3m.	Johnson´s criteria - NATO standard - 13mm. focal length	
Detection		1.661m.
Recognition	415m.	
Identification	208m.	

Human target 1,8x0,5m.	Johnson´s criteria - NATO standard - 19mm. focal length	
Detection		792m.
Recognition	198m.	
Identification	99m.	

Vehicle target 2,3x2,3m.	Johnson´s criteria - NATO standard - 19mm. focal length	
Detection		2.428m.
Recognition	607m.	
Identification	303m.	

Human target 1,8x0,5m.	Johnson´s criteria - NATO standard - 25mm. focal length	
Detection		1.042m.
Recognition	260m.	
Identification	130m.	

Vehicle target 2,3x2,3m.	Johnson´s criteria - NATO standard - 25mm. focal length	
Detection		3.194m.
Recognition	799m.	
Identification	399m.	



Short-Mid Range Thermal Lenses

High flexibility lens for long distance surveillance applications such as border control or coastal surveillance applications. Capable to provide wide angle HFOV with 13mm. and very long distances and close HFOV with 55mm. narrow angle lenses.

Advanced Video Analysis and AI

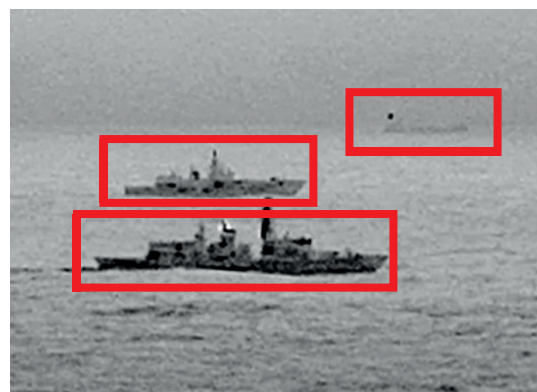
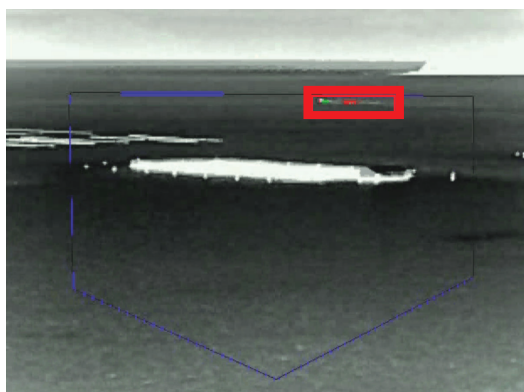
Advanced video analytics are designed to protect critical facilities, large protected areas, border control or military facilities from possible threats. Tanz Security video analytics are advanced algorithms capable to detect intrusions in very long distances and with very low false alarms.

Avoid false alarms caused by white-listed objects into a controlled scenario. Tanz video analytics are able to determine and follow complex rules to avoid the usual analytics false alarms.

Tanz analytics are dedicated to specific type of video images. Differentiating color video and thermal video differences with specific algorithms for each type. This provides Tanz analytics a superior performance.

Thanks to the advance design of the software, we can protect areas located in far distances, and once a threat is detected make slew to cue tracking of the moving object.

The advanced analytics can implement AI (Artificial Intelligence) to classify and detect military vehicles, vessels and other specific targets. The system includes a deep learning engine to teach the system tailored object detection.



Thermal - DRI Distances

Human target 1,8x0,5m.	Johnson's criteria - NATO standard - 35mm. focal length	
Detection		1.458m.
Recognition		365m.
Identification		182m.
Vehicle target 2,3x2,3m.	Johnson's criteria - NATO standard - 35mm. focal length	
Detection		4.472m.
Recognition		1.118m.
Identification		559m.
Human target 1,8x0,5m.	Johnson's criteria - NATO standard - 55mm. focal length	
Detection		2.292m.
Recognition		573m.
Identification		286m.
Vehicle target 2,3x2,3m.	Johnson's criteria - NATO standard - 55mm. focal length	
Detection		7.028m.
Recognition		1.757m.
Identification		878m.

* Different weather conditions and temperature changes may affect to final distances, the stated distances are references.

* STANAG4347 / Thermal Imager- 2° temp difference & $\sigma=0.2 \text{ km}^{-1}$ atmospheric attenuation factor / Day Imager- 1000 lux illumination and target contrast of 20%. Probability 50%.

* GE window included in all lenses under/and 55mm.

* TCIS6 - THC6 single sensor model can use only an infrared or a day/night sensor.

* Tanz Security reserves the right to change products or specifications without notice.

* Tanz Security brand and logo are registered trade marks.

