

HP-TRC Series

Multi-Camera PTZ System



*The picture is for reference only, the appearance of the product is subject to the actual production

System Overview

This series Long Range Thermal Imaging Camera products are based on the latest 7th generation uncooled infrared technology and with continuous zoom infrared optical technology. It also equipped with high resolution daylight camera with defog function for long distance daytime details observation. Laser illumination is available for 4km night vision observation. The system can also equip with LRF

Technical Specification

Thermal Camera

Image Sensor	Vox Detector
Effective Pixels	640(H)x512(V)/ 384(H)x288(V)
Pixel Size	12/17μm
Thermal Sensitivity (NETD)	≤40mK@f/4.0
Spectral Range	7 ~ 14μm
SDE	Support SDE digital image processing
Pseudo Color	16 pseudo color and B/W, B/W inverse
AGC	Support
Digital Zoom	8X
Strong Light Protect	Support
Temp Correction	Thermal imaging clarity is not affected by temperature
Scene mode	Support multi-configuration scenarios
Lens Servo	Support lens preset, focal length return and location
Azimuth Information	Support angle real-time return and positioning
Parameter Setting	OSD Menu Remote Call Operations.
Life Index Recording	Working/shutter times, ambient/sensor temperature

- 384x288, 640x512 thermal sensor
- 105/120/155/190/230/300mm zoom thermal lens
- 30x/36X/47/64/83X CCTV lens with 16X digital zoom
- Max 20W (4km), max 20km LRF option
- IP66 and - 40 °C low temperature resistance

Thermal Lens

Focal Lens	21-105mm; 30-120mm; 31-155mm; 38-190mm 22-230mm; 20-300mm
FOV (384x288, 17μm)	21-105mm: 18.5°x13.9°~3.7°x2.8° 30-120mm: 12.4°x9.3°~3.1°x2.3° 31-155mm: 12.4°x9.3°~2.5°x1.8° 38-190mm: 10.6°x8°~2.1°x1.6° 22-230mm: 17°x12.6°~1.7°x1.3° 20-300mm: 18.5°x14.0°~1.2°x1.9°
FOV (640x512, 17μm)	21-105mm: 30°x23°~6.2°x4.6° 30-120mm: 20°x15°~5°x3.8° 31-155mm: 20°x15°~4°x3° 38-190mm: 17.6°x13.2°~3.5°x2.6° 22-230mm: 28°x21°~2.7°x2° 20-300mm: 30.4°x24.6°~2.1°x1.6°
Effective Distance (Vehicle: 2.3x2.3m) D: Detection R: Recognition I: Identification	21-105mm: 8.6km (D); 2.4km (R); 1.18km (I) 30-120mm: 10km (D); 2.8km (R); 1.3km (I) 31-155mm: 13km (D); 3.4km (R); 1.7km (I) 38-190mm: :16.4km (D); 4.2km (R); 2.1km (I) 22-230mm: 18km (D); 4.8km (R); 2.5km (I) 20-300mm: 20km (D); 6.7km (R); 3.3km (I)
Effective Distance (Human: 1.8x0.5m) D: Detection R: Recognition I: Identification	21-105mm: 3.4km (D); 1.7km (R); 0.9km (I) 30-120mm: 4km (D); 2km (R); 1km (I) 31-155mm: 4.8km (D); 2.5km (R); 1.3km (I) 38-190mm: 5.8km (D); 3km (R); 1.6km (I) 22-230mm: 6.8km (D); 3.8km (R); 1.8km (I) 20-300mm: 8km (D); 5km (R); 2.5km (I)
IVS Range	21-105mm: 3km for Vehicle; 1.1km for Human 30-120mm: 3.7km for Vehicle; 1.3km for Human 31-155mm: 4.6km for Vehicle; 1.6km for Human 38-190mm: 5.8km for Vehicle; 2.1km for Human 22-230mm: 7km for Vehicle; 2.5km for Human 20-300mm: 9km for Vehicle; 3.3km for Human

Visible Camera

Sensor	180/240/330mm: 1/2.8" Star Level CMOS 500/860/1000/2000mm: 1/2.8" Star Level CMOS
Resolution	1920(H)x1080(V)
Frame Rate	32Kbps~16Mbps, 60Hz
Min. Illumination	0.0005Lux (Color), 0.0001Lux (B/W)
SD Card	Support
Defog	Support SDE digital image processing
BLC/WDR/HLC	Yes
AGC	Support
Digital Zoom	16X

Visible Lens

Focal Lens	4.7~141mm 30X 6.5~240mm 36X 8~320mm 40X 8~500mm 62X 11~860mm 83X 12~1000mm 83X 24~2000mm 83X
Image Stabilization	Support
Focus Control	Manual/Auto

PTZ

Patrol	16*Patrol Route, 256 Preset for each route
Rotation	Pan: 0~360°, Tilt: -45~+45°
Speed	Pan: 0.01~30°/S, Tilt: 0.01~15°/S
Preset	3000

Interface

Ethernet	RS-485, RS-232, RJ45
Protocol	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE, ONVIF
Video Output	PAL/NTSC
Power	AC12V /DC24V
Compression	H.265 / H.264 / MJPEG

Environmental

Operate Temp	-25°C~+55°C (-40°C optional)
Storage Temp	-35°C~+75°C
Humidity	<90%
Ingress Protect	IP66
Housing	PTA t coating, Seawater corrosion resistance
Anti-fog/salty	PH 6.5~7.2
Power	150W (Peak)

Video

Thermal Resolution	1920×1080; 1280×1024; 1280×960; 1024×768; 1280×720; 704×576; 640×512; 640×480; 400×300; 384×288; 352×288; 352×240
Visible Resolution	2592×1520; 2560×1440; 1920×1080; 1280×1024; 1280×960; 1024×768; 1280×720; 704×576; 640×512; 640×480; 400×300; 384×288; 352×288; 352×240
Record Rate	32Kbps~16Mbps
Audio encoding	G.711A/ G.711U/G726
OSD settings	Support OSD display settings for channel name, time, gimbals orientation, field of view, focal length, and preset bit name settings

Sensor Option

Laser	5W: 500m night vision 10W: 1.5km night vision 12W: 2km night vision 15W: 3km night vision 20W: 4km night vision
LRF	5~300m; 50~3000m; 50~5000m; 100~8000m; 100~10000m; 200~15000m; 200~20000m
GPS	Accuracy: <2.5m; Autonomous 50%: <2m (SBAS)
E-compass	Measurement range: 0~360°; accuracy: heading: 0.5°, pitch: 0.1°, resolution: 0.01°. Inclination range ±80°

Order Information

TRC6511-1930-5WZ	Thermal: 21~105mm, 384x288 Visible: 2mp, 5.5~180mm; Laser: 5W
TVC6511-1930-3LRF	Thermal: 21-105mm, 640x512 Visible: 2mp, 5.5~180mm; LRF: 3km
TVC6516-2121-10WZ	Thermal: 30-120mm, 640x512 Visible: 2mp, 6.5~240mm; Laser:10W
TVC6516-2132-5LRF	Thermal: 31-155mm, 640x512 Visible: 2mp, 7~330mm; LRF: 5km
TVC6519-2150-12WZ	Thermal: 38-190mm, 640x512 Visible: 2mp, 8~500mm; Laser: 12W
TVC6519-2150-10LRF	Thermal: 38-190mm, 640x512 Visible: 2mp, 8~500mm; LRF: 10km
TVC61023-2186-15WZ	Thermal: 22~230mm, 640x512 Visible: 2mp, 11~860mm/ Laser: 15W
TVC61023-2186-15LRF	Thermal: 22~230mm, 640x512 Visible: 2mp, 11~860mm/ Laser: 15km
TVC61530-21100-20WZ	Thermal: 15-300mm, 640x512 Visible: 2mp, 12~1000mm/ Laser: 20W
TVC61530-22200-20LRF	Thermal: 15-300mm, 640x512 Visible: 2mp, 24~2000mm/ LRF: 20km
TVC6516-2132-5L10WZ	Thermal: 31-155mm, 640x512 Visible: 2mp, 7~330mm/ LRF: 5km/ Laser: 10W
TVC61530-21100-20L20WZ	Thermal: 15-300mm, 640x512 Visible: 2mp, 12~1000mm/ LRF: 20km/ Laser: 20W