

HP-HCTVC Series

Cooled Long Range Thermal Camera



*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. Support GPS, electronic map option with auto-tracking, fire-alarm, and smart analysis functions.

Technical Specification

Thermal Camera

Image Sensor	Cooled Focal Plane Array (FPA) MCT HgCdTe detector
Effective Pixels	640(H)x512(V)
Pixel Size	15μm
Thermal Sensitivity (NETD)	≤20mK@f/4.0
Spectral Range	3.7 - 4.8μm, MWIR
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
- 300/450/660/800/1100mm thermal lens
- 10X/15X/20X thermal zoom lens with 8X digital zoom
- 30x/36X/47/64/83X CCTV lens with 16X digital zoom
- NETD 20mk enhance the imaging details
- IP66 and - 40 °C low temperature resistance

Thermal Lens

Focal Lens	30~300mm 15~300mm 22~450mm 30~660mm 40~800mm 90~1100mm
FOV	30~300mm: 18.2°x14.6°~1.8°x1.5° 15~300mm: 35°x28°~1.8°x1.46° 22~450mm: 24.6°x19.8°~1.2°x1.0° 30~660mm: 18.2°x14.6°~1.8°x1.5° 40~800mm: 13.6°x11°~0.7°x0.51° 90~1100mm: 6.1°x4.9°~0.5°x0.4°
Effective Distance (Vehicle: 2.3x2.3m)	300mm: 18km (D); 7km (R); 3.5km (I) 22~450mm: 19km (D); 9km (R); 4.5km (I) D: Detection R: Recognition I: Identification
Effective Distance (Human: 1.8x0.5m)	15~300mm: 11km (D); 3.5km (R); 1.8km (I) 22~450mm: 12km (D); 4.5km (R); 2.3km (I) D: Detection R: Recognition I: Identification
Effective Distance (Human: 1.8x0.5m)	30~660mm: 14km (D); 6.3km (R); 3.2km (I) 40~800mm: 15km (D); 8km (R); 4km (I) 90~1100mm: 18km (D); 9km (R); 4.5km (I)
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

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

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℃~+55℃ (-40℃ optional)
Storage Temp	-35℃~+75℃
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, gimbal orientation, field of view, focal length, and preset bit name settings

Smart

Fire Detection	threshold 255 levels, targets 1-16 can be set, hot spot tracking
AI Analysis	Support intrusion detection, boundary crossing detection, entering/leaving area detection, motion detection, wandering detection, people gathering, fast moving, target tracking, items left behind, items taken; people/vehicle target detection, face detection; and support 16 area settings; support intrusion detection people, vehicle filtering function; support target temperature filtering
Auto-tracking	Single/multi scene tracking; panoramic tracking; alarm linkage tracking
AR Fusion	512 AR intelligent information fusion
Distance Measure	Support passive distance measurement

Order Information

CTC61532-1930WZ	Thermal: 15~300mm,640x512 Visible: 2mp, 5.5-180mm
CTC63030WZ	Thermal: 30~300mm, 640x512 Visible: 2mp, 6.5-240mm
CTC62245WZ	Thermal: 22~450mm, 640x512 Visible: 2mp, 7-330mm
CTC63066WZ	Thermal: 30~660mm, 640x512 Visible: 2mp, 11-860mm
CTC64080WZ	Thermal: 40~800mm, 640x512 Visible: 2mp, 11-860mm
CTC690110WZ	90~1100mm, 640x512 Visible: 2mp, 12-1000mm
CTC690110WZ	90~1100mm, 640x512 Visible: 2mp, 24-2000mm