

# HP-HTRC Series

## Multi Sensor Thermal Security Camera



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

\*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 max laser 20W for 4km night vision or 20km laser range finder for more function

### 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

### 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)

## Laser Illumination

Power	5W: 800m 10W: 1500m 12W: 2000m 15W: 3000m 20W: 4000m
Angle	5W: 3°~50° 10W: 1°~20° 12W: 0.7°~20° 15W: 0.5°~20° 20W: 0.3°~20°
Homogenization	WZ-II super homogenizing
Focus Angle	Precision digital code disk drive positioning
Security	IEC60825

## LRF

Distance	5-300m; 50~3000m; 50~5000m; 100-8000m; 100-10000m; 200-15000m; 200-20000m
Wave Length	1570nm
Accuracy	0.2m
Frequency	0.2HZ

## Order Information

HTRC6511-1930-5WZ	Thermal: 21~105mm, 640x512 Visible: 2mp, 5.5~180mm / Laser: 5W
HTRC6511-1930-3LRF	Thermal: 21~105mm, 384x288 Visible: 2mp, 5.5~180mm / LRF: 3000m
HTRC6512-2121-10WZ	Thermal: 30-120mm, 640x512 Visible: 2mp, 6.5~240mm / Laser: 10W
HTRC6512-2121-5LRF	Thermal: 30-120mm, 640x512 Visible: 2mp, 6.5~240mm / LRF: 5000m
HTRC6516-2132-10WZ	Thermal: 31-155mm, 640x512 Visible: 2mp, 7~330mm / Laser: 10W
HTRC6516-2132-8LRF	Thermal: 31-155mm, 640x512 Visible: 2mp, 7~330mm / LRF: 8000m
HTRC6519-2150-12WZ	Thermal: 38-190mm, 640x512 Visible: 2mp, 8~500mm / Laser: 12W
HTRC6519-2150-10LRF	Thermal: 31-155mm, 640x512 Visible: 2mp, 8~500mm / LRF: 10000m
HTRC61023-2186-15WZ	Thermal: 22~230mm, 640x512 Visible: 2mp, 11~860mm / Laser: 15W
HTRC61023-2186-15LRF	Thermal: 22~230mm, 640x512 Visible: 2mp, 11~860mm / LRF: 15000m
HTRC61530-21100-20WZ	Thermal: 15-300mm, 640x512 Visible: 2mp, 12~1000mm / Laser: 20W
HTRC61530-21100-20LRF	Thermal: 15-300mm, 640x512 Visible: 2mp, 12~1000mm / LRF: 20000m
HTRC61530-22200-20LRF-20WZ	Thermal: 15-300mm, 640x512 / LRF: 200000m Visible: 2mp, 24~2000mm / Laser: 20W