INTERNATIONAL ARMOUR

IRS-PT9S2
HD Thermal Camera

IRS-PT9S2 Air Surveillance Camera integrates HD visible light camera, cooled thermal camera, laser ranging finder, automatic tracking, gyro stabilization, intelligent analysis and precise electronic control. It is designed for air target video acquisition, target warning, radar linkage and other applications designed, which can adapt to all-weather, all-time, full-dimensional discovery.

The shell is made of super strong aluminum alloy material, with strong wind resistance, low agitation. The protection grade of the whole machine reaches IP66. With special salt-spray protection design, the protection grade reaches C5-M level, which effectively ensures the long-term stable 6 operation of the equipment in the harsh ring mirror of the sea.

HIGHLIGHTS

- ▶ 120°/s fast rotation speed and 0.02° accuracy can track land/air/sea target
- ▶ Front-end auto-tracking functions for high accuracy target tracking
- ▶ Function of life index recording for thermal camera
- ▶ WZ Non-uniform image correction technology, good image uniformity and dynamic range.
- ▶ 2-axis gyro image stabilizer for stable image during wave and strong wind, accuracy≤2mrad
- ▶ Special IP66 design enable camera can work in salty/strong light/water spray/ 33m/s wind environment
- ▶ One IP address optional: Visible, thermal camera can view, set and control by one IP address
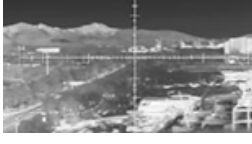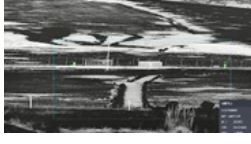
| Auto Track | Intrusion Detection | High Resolution | Ranging Scale |

PARAMETERS

	Model	IRS-PT9S2
Effective Distance (DRI)	Vehicle (2.3*2.3m)	Detection: 20km; Recognition: 13km; Identification: 6.5km
	Human (1.8*0.6m)	Detection: 15km; Recognition: 8km; Identification: 4km
	Drone (DJ4 Size)	Detection: 4.8km(thermal), 5km (HD)/ Tracking: 2km (thermal), 3km (HD)
Thermal Sensor	Sensor	Cooled Focal Plane Array (FPA) MCT HgCdTe detector
	Cooling	Stirling cryocooler (Life time 8000~10000 hrs)
	Effective Pixels	1260*1024
	Pixel Size	10μm
	NETD	≤20mK
	Spectral Range	3.7 - 4.8μm, MWIR
Thermal Lens	Focal length	40-750mm 18X
	FOV	15.5°×12.4° ～1.0°×0.8°
	Angular radian	0.013～0.213mrad
	Digital Zoom	1~8X Continuous Zoom (Step 0.1)
Visible Camera	Sensor	1/2.8" Star Level CMOS, Integrated ICR Dual Filter D/N Switch
	Resolution	1920(H)x1080(V)
	Frame Rate	32Kbps～16Mbps，60Hz
	Min. Illumination	0.0001Lux (Color), 0.0005Lux(B/W)
	SD Card	Support
Visible Lens	Lens Size	12~1000mm 83X
	Image Stabilization	Support
	Defog	Support
	Focus Control	Manual/Auto
	Digital Zoom	16X
Image	Image Stabilization	Support Electronic Image Stabilization
	Enhance	Stable operational temperature without TEC, starting time less than 4 seconds
	SDE	Support SDE digital image processing
	Pseudo Color	16 pseudo color and B/W, B/W inverse
	AGC	Support
	Ranging Ruler	Support
Enhance	Strong Light Protect	Support
	Temp Correction	Thermal imaging clarity is not affected by temperature.
	Scene mode	Support multi-configuration scenarios, adapt to different environment
	Lens Servo	Support lens preset, focal length return and focal length location.
	Azimuth Information	support angle return and positioning; azimuth video overlay real-time display.
	Diagnostic Functions	Disconnection alarm, support IP conflict alarm, support illegal access alarm (illegal access times, lock time can be set), support SD card abnormal alarm (insufficient Space, error, no SD card), video masking alarm, anti-sun damage (threshold, masking time can be set).
	Life Index Recording	**Working time, shutter times, ambient temperature, core device temperature**
	Power off memory	Support, can restore power off state
	Remote maintenance	remote restart, remote upgrade function, convenient system maintenance
Intelligent	Fire Detection	Threshold 255 levels, targets 1-16 can be set, hot spot tracking
	AI Analysis	Support intrusion, boundary crossing, entering/leaving area, motion, wandering, people gathering, fast moving, target tracking, items left behind and items taken detection; 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
	Image fusion	Support 18 kinds of double light fusion mode, support picture-in-picture function
PTZ	Accuracy	0.02°, pulse precision motor, digital angle measurement sensor servo
	Rotation	Pan: 0～360°, tilt: -90～+90°
	Speed	Pan: 0.01~80°/S, Tilt: 0.01~60°/S
	Preset	3000
	Patrol	16*Patrol Route, 256 Preset for each route
	Patrol Mode	Preset position/pattern scanning/cruise scanning/vertical scanning/frame scanning/panoramic scanning/apple peel scanning/horizontal sector scanning
	Enhance	Fan/Wiper/Heater attached
	Split	Upper and lower split design, can be packaged and transported, combined quickly
	Zero Setting	support the setting of pan and pitch zero
	Position Time	less than 4s
	Gyro Stable (Option)	Stability accuracy-2mrad (RMS), two-axis gyro stable, shake≤±10°
	Angle Feedback	support real-time / query return and positioning functions of horizontal and pitch angles
Video Audio (Single IP)	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
Interface	Ethernet	RS-485（PELCO D protocol, baud rate 2400bps），RS-232（option），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	DC48V
Environmental	Compression	H.265 / H.264 / MJPEG
	Operate Temp	-25℃～+55℃（-40℃ optional）
	Storage Temp	-35℃～+75℃
	Humidity	<90%
	Ingress Protect	IP66
	Housing	PTA three-resistance coating, Seawater corrosion resistance, Aviation waterproof plug
	Wind resistance	spherical, anti-shake, anti-33m/s strong wind
	Anti-fog/salty	PH 6.5～7.2 (No less than 700 hours)
	Lighting Proof	6000V
	Power	250W (Peak)/ 50W (Stable)
Software Function (DF3000)	3D Zoom	Automatically adjust the size and orientation camera image for selected target
	Radar Linkage	Support radar manage and display;
	Electronic Map	Support multi-camera display; distance and area size measurement
	Auto-tacking	Support auto/manual tracking; Support panorama view, radar linkage tracking
	Mobile App	Android Platform
	AI Server (Option)	Vehicle/Animal/Human/Ship/Drone/Helicopter/Airplane/Trunk/Fire/Smoke Identification