Long Distance PTZ Multi Sensor Thermal Camera

ZTR Series Multi-spectrum Optical Electronical Platform combines visible camera, laser illuminator night vision system, and thermal camera that suit long distance monitoring in total darkness and foggy/rainy environment. It has a dome shape housing and with military quality, the camera is widely applied to coastal security, seaport surveillance, airport security, Forest fire prevention and city outlook.

In the day time, HD lens and 2 mega pixel color to B/W CCD works. At day/night, the 1280*1024 high sensitive cooled/uncooled thermal camera works.

The multi- spectrum photoelectronic platform can monitor a region of 1~20km in 24 hours. Internal industrial-grade embedded electronic control system support the ZTRC operation: zoom, focus, video switch, pan tilt. The integral aluminum alloy housing IP67 makes sure outdoor long running.

Feature

1. Proper functioning in severe environment: reinforced aluminum alloy housing.
2. Conformal coating, anti-seawater corrosion, spherical housing reduces wind resistance (33m/s wind).
3. High-precision locating: the high-precision electric motor and angle encoder ensures ±0.02°locating tolerance.
4. Real-time feedback of direction, rotation speed, focal length and focusing data ensures precise track.
5. High load duty: it can carry 1100mm visible camera, heavy caliber thermal camera
6. Realizing more than 20km detection distance.
7. Max rotation speed 80°/s, min rotation
8. Pan rotation angle range 0-360°, tilt rotation angle range ±90°.
9. The automatic tracking module designed with a variety of advanced target acquisition algorithms and tracking algorithms, supplemented by high-precision servo control, the tracking accuracy can reach ±0.5mrad, ensuring the stable tracking of the target in the process of fast flight and direction change;
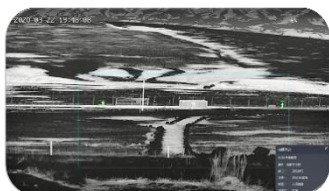10. Integrating thermal camera, visible camera, PTZ
11. The camera is capable of conducting long range monitoring in all black or foggy/rainy environment.
12. One integral aluminum alloy housing, waterproof, IP67 ingress protection, dustproof.

Application

Border/Costal defense, harbor, oil field, river lane, airport, safe city, UAV detection

Technical specification

Model	EMSZTR232141-32211-LRF
Detection	Vehicle: 20km，Human: 8km
Recognition	Vehicle:6km，Human: 3km
Thermal Camera System	
Thermal sensor	Uncooled Vox Sensor
Resolution	1280*1024
Wave length	8～14μm
NETD	20mk
Pixel Size	12um
Lens	23mm~300mm zoom lens
Zoom	13X optical zoom, 8X digital zoom
Lens control	Manual /Auto focus
Image enhancement	SDE digital image enhancement technology
Pseudo color	18 kinds of pseudo color, hot-black /hot-white
PIP	Include
Image	AGC/Brightness/Contrast
Range ruler	Support range ruler to measurement distance
Correction	Shutter/Background
Anti-Sunburn	Support
Classification Recognition	Human/Vehicle/Ship/Drones/Animal, and so on
Daylight Camera System	
CMOS	High sensitive star light CMOS
Illumination	Color: 0.0002Lux; Black/White: 0.0001 Lux
Focal length	12~1100mm full HD lens, 91X zoom, auto focus
Image	Support white balance, electronic shutter, backlight compensation, strong light suppression, 2D/3D digital noise reduction, electronic image stabilization
Defog	Support
Laser night vision	
Laser illuminator	15~20W 810nm military NIR
Laser angle	0.5°~20°
Laser IR distance	≥3km
Audio/Video	
Thermal Resolution	support 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
Video	H.265/H.264/MJPEG，multi-stream support
Video bit rate	32Kbps～16Mbps
OSD Setting	Support OSD display settings for channel name, time, gimbal orientation, field of view, focal length, and preset bit name settings
Fire/Smoke Alarm	
Alarm Threshold	255 level can be adjustable

Target	Adjustable, auto recognize different object
Alarm Mode	Video display and Sound alarm
Intelligent Function	
Intelligent Analytic	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,and support 16 area settings; support intrusion detection people, vehicle filtering filtering function;
Auto Track	support single scene tracking/support multi-scene tracking/support panoramic tracking/support alarm linkage tracking
Image fusion	Support
Distance measurement	By range ruler
Anti-Sunburn	Support
Remote maintenance	Support
Web access	Support
Life-time management	Support
Pan tilt	
Structure	Dome model, multi-dimensional free-form surface shape, small wind resistance, strong anti-shake, anti-33m/s strong wind
Separate design	Separate design, easy for transport
Rotation	N*360，±90
Speed	Horizontal: 0.01~80°/s ; Vertical: 0.01~60°/S
Acceleration	Horizontal: 100°/s ; Vertical: 100°/S
Positioning Accuracy	＜ 0.02°
Positioning Accuracy	＜ 4s
Zero Point Settings	Support zero point settings for horizontal and vertical
Preset	3000
Interface	
Interface	RJ45 network interface and RS485
Protocol	Support HTTP，HTTPS，FTP，SMTP，DNS，NTP，RTSP，RTCP，RTP，TCP，UDP，ICMP，DHCP,ONVIF,GB28181
SDK	Support
Others	
Power Supply	AC90V~305V power adapter
Power consumption	Normal: 150W; Peak: 500W
Working temperature	-40 ℃ ~ + 60 ℃
Storage temperature	-45 ℃ ~ + 70 ℃
Humidity	<90%RH
Lightning protection	Support, interface circuit has built-in surge protection, 6000V
Anti-salt spray	Support
Dimensions	480*825mm
Weight	105kg