Multi-spectral target recognition tracking servo PTZ Camera

Key Features

- Visible + thermal imaging combination, multi-channel imaging, data fusion;
- Automatic zoom, focus, optical Defog, servo tracking integrated design;
- Edge computing, more than 80 types of target classification and recognition algorithms for people, cars, airplanes, etc. are available, specific target detection and recognition;
- Integration of heat source detection, tracking, early warning and alarm, linked to visible image zoom close-up and capture;
- Horizontal: 0-360° infinite position, Vertical: -90--+90°;
- Accurate azimuth and field of view return, temperature and humidity, angle deflection multiple data fusion;
- Low power consumption, the whole machine steady state power consumption ≤ 30W, the weight of the machine ≤ 8KG;
- Access: radar guidance, spectrum positioning guidance, GPS positioning, environmental data, power management;
- IP66 protection, optional shock absorbing design;
- To-air 1-2KM low-small-slow target detection, tracking and identification, intelligent early warning;
- To-air 1-12KM large aircraft target detection, tracking, 1-3KM aircraft landing gear target identification

Technical parameters

Model	
Model No.	SVN-9512-U1V48-D75
Visible Image	
Image resolution	1920*1080 @25fps/30fps
Lens focal length	F6.5-312mm (48X optical continuous zoom)
Image Mode	Color, black & white, optical Defog
Image Adjustment	White balance, exposure compensation, wide dynamic, gain control, 3D noise reduction
Video parameters	Brightness, Contrast, Sharpness, Saturation
Focus mode	Automatic / Manual
Daytime Performance Indicators	1. Reference target: civil aviation airliner Detection distance: ≥12KM; tracking distance: ≥8KM; identification distance: ≥6KM 2.Reference target: UAV 0.35m*0.35m

	Detection distance: ≥2.5KM; Tracking distance: ≥2KM; Recognition distance: ≥1.5KM (Working conditions: ambient temperature: 20℃, visibility: ≥20Km, relative humidity: <40%)
Thermal image	
Detector type	Uncooled
Image resolution	640*512; image encoding resolution: 1280*1024
Lens focal length	Fixed Focus 75mm
Image Mode	Thermal black, Thermal white, Pseudo-color
Video parameters	Brightness, Contrast, Sharpness, Saturation
Night performance indicators	1. Reference target: civil aviation airliner Detection distance: ≥5KM; tracking distance: ≥3KM; identification distance: ≥2KM 2.Reference target: UAV 0.35m*0.35m Detection distance: ≥1.1KM; Tracking distance: ≥0.8KM; Recognition distance: ≥0.6KM (Working conditions: ambient temperature: 20℃, visibility: ≥20Km, relative humidity: <40%)
Servo turntable	
Turntable Type	Stepper motor, PID feedback
Horizontal range, speed	0°~360° horizontal keying speed: 0.1°~80°/s
Vertical range, speed	-90°~90° vertical keying speed: 0.1°~60°/s
Angular deflection correction	Electronic compensation
Preset Bit Stop Accuracy	±0.01°
PTZ Functions	3D control, watchdog position, auto cruise, fancy scanning, telephoto speed limit
Intelligent Applications	
Automated searches	Full-screen motion target search, hot target tracking search
Bootstrap model	Can receive radar, spectrum, TDOA, ADS-B; multi-point photoelectric positioning guidance
Tracking mode	Specific target recognition tracking, moving target tracking, guided tracking, manual tracking
Target identification	Support more than 80 kinds of classification targets such as drones, people, cars, boats, etc. classification and recognition, similarity judgment, etc.
Early warning linkage	Alarm protocol upload, capture, preset position linkage
Image and system	
video compression format	H.256 / H.264 / MJPEG (image capture only)
Video protocol	ONVIF, GB T-28181, RTSP
Network protocol	IPv4, TCP/IP, UDP, etc.
Network function	System remote upgrade, virtual dual IP address
Diagnostic monitoring	IP conflict detection, heartbeat detection, logging
General	
Interfaces	Standard Circular Connector interface (including: DC24V power supply, 10M/100M adaptive network interface)
Protection class	IP66
Operating Temperature/Humidity	20℃~+60℃, humidity <90% Optional: -40℃~+60℃
Power supply & power consumption	AC220V ±15% (photoelectric system) normal operation ≤30W, start peak ≤50W
Size	352mm(W) ×245(L)×275mm(H)
Weight (net)	≤8Kg

Industry-specific platform management software, Tracer, SDK, or customized industry application software

Size(mm)

351.6

275

245

R4.5

160

120

150

130