

 AGT-TRC6511-2132 Distance High Speed Thermal Imaging Camera for Airport

MISSION CATALOG · CB-000036

AGT-TRC6511-2132 DISTANCE HIGH SPEED THERMAL IMAGING CAMERA FOR AIRPORT

The AGT-TRC6511-2132 is a long-range dual-spectrum PTZ camera with 640×512 VOx thermal imaging, 5× continuous zoom, HD visible video, las...

Model AGT-TRC6511-2132

KEY BENEFITS

- Unique AS+DOE advanced optical continuous zoom design with 3CAM high-precision optical machine for stable, smooth zooming and long-range recognition
- Excellent non-uniform image correction technology delivering good image uniformity and dynamic range
- SDE image detail enhancement technology for smooth, noiseless images with 16 pseudo-color modes and hot black/hot white polarity switching
- Easy detection of low-contrast hidden targets thanks to adaptive image processing and polarity modes
- Rugged sealed housing with thermal equilibrium, corrosion-resistant coating, and surge protection for reliable outdoor operation

DESCRIPTION

The AGT-TRC6511-2132 is a high-speed dual-spectrum pan/tilt camera that integrates an uncooled VOx thermal imager, full HD visible camera, 808 nm laser illuminator, video encoding, and PTZ control electronics inside a sealed aluminum housing. It delivers 5× continuous thermal zoom (21–105 mm), 40× visible zoom (8–320 mm), SDE image enhancement, 16 pseudo-color modes, and precise DSS laser illumination control for long-range detection and identification. Built for harsh environments, the camera features IP66 ingress protection, anti-lighting surge protection, thermal equilibrium management, and a seawater-corrosion-resistant PTA coating. It supports a wide operating temperature range and multiple network protocols for seamless integration into security and surveillance systems.

OVERVIEW

- Integrates infrared thermal imaging, HD visible imaging, laser illuminator, video coding, pan/tilt housing, and control electronics in one system
- Visible imaging uses a full HD color/black-and-white low-illumination CMOS sensor with compact continuous zoom lens
- Latest-generation MEMS-based VOx detector with NETD up to 50 mK, providing higher sensitivity, finer image quality, and better performance in fog, rain, and snow
- Day/night operation with coordinated laser and visible-camera switching

APPLICATIONS

- Seaport and airport monitoring
- Water system monitoring
- Storage monitoring
- Base security monitoring
- Oilfield and oil depot security
- Fire source prevention and monitoring
- Ecological and environmental monitoring
- Border and coastal defense
- Urban security and anti-UAV applications
- Highway and railway monitoring

TECHNICAL SPECIFICATION

THERMAL	
Focal length	21 mm~105 mm
Zoom	5× continuous zoom
Focus	auto focus
Field of view	30° × 23° ~ 6.2° × 4.6°
Image enhancement	SDE digital image enhancement
Pseudo-color modes	16
Polarity	hot black/hot white
AGC	AGC
Brightness	brightness
Contrast	contrast
Electronic zoom	2×, 4× with global synchronous display
Zoom control	electrical zoom
Focus control	manual/auto focus
Optical mode	3CAM mode
Optical structure	AS+DOE optical structure
IR transmission	high IR transmission
Zoom virtual focus	no virtual focus during zoom
Axis	small axis

TECHNICAL SPECIFICATION

VISIBLE	
Sensor type	1/2.8" star-level CMOS
Min illumination color	0.05 lux
Min illumination B/W	0.01 lux
Resolution MP	2 MP
Resolution pixels	1920×1080
ICR switch	automatic
Video compression	H.264/H.265/MPEG4/MJPEG
Bitrate	32 Kbps~16 Mbps
Frame rate	60 Hz/30 FPS
Focal length	8 mm~320 mm
Lens resolution	2 MP
Zoom	40×
Focus	auto focus
LASER	
Power	10 W
Wavelength	808 nm NIR
Illumination angle	1°~20°
Sync control	DSS digital stepping illumination angle control technology
Servo precision	0.1° precise servo control

TECHNICAL SPECIFICATION

CONSUMPTION	
Laser	10 W
HOUSING	
Material	high strength aluminum alloy shell
Sealing	waterproof seal
Mold resistant	mold resistant
Moisture resistant	moisture resistant
Surface coating	PTA three-resistance coating
Corrosion resistance	seawater corrosion resistance
Thermostat	built-in thermostat
Thermal equilibrium	thermal equilibrium design
PTZ	
Load capacity	30 kg
Pan range	0~360°
Tilt range	+45°~-45°
Pan speed	0.01~60°/s
Tilt speed	0.01~30°/s
Presets	255
Cruising lines	6
Apple-skin scanning	1
Line cruising	1

TECHNICAL SPECIFICATION

INTERFACE	
Connector	aviation waterproof plug
NETWORK	
Interface	RJ45
Transport protocols	TCP/IP, UDP, IPv4/v6
Application protocols	HTTP, RTP, RTSP, NFS, HDCP, NTP, SMTP, PPPoE, DNS, FTP, Onvif
POWER	
Supply	AC/DC 24 V
Reverse polarity protection	anti-reverse connection protection
ENVIRONMENT	
Working temperature	-25 °C~+60 °C
Optional working temperature	-40 °C
Storage temperature	-45 °C~70 °C
Seismic resistance	0.2 g
Impact resistance	15 g
Surge protection device	built-in auto fuse-protected device
Power protection voltage	4000 V
Signal protection voltage	2000 V
Ingress protection	IP66

COMMERCIAL TECHNICAL DATA

DATASHEET · EN

DOCUMENT CONTROL SHEET

ISSUING AUTHORITY

ORGANIZATION	Volls Global Inc
REGISTERED OFFICE	1207 Delaware Ave #5352
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