



MISSION CATALOG · CB-000028

AGT-TC6511 LONG RANGE PROFESSIONAL THERMAL IMAGING CAMERA FOR ANTI-UAV

The AGT-TC6511 is a long-range professional thermal imaging camera system for anti-UAV and perimeter security, featuring a 640×512 VOx un...

Model AGT-TC6511

KEY BENEFITS

- Long range 24-hours monitoring
- Delicate and smooth images
- Convenient for installation and application
- 360 degree omni-directional pan-tilt
- Super-strong aluminum alloy with IP66
- Higher sensitivity
- Effective in all environments
- Small size and low weight

DESCRIPTION

The AGT-TC6511 is a long-range professional thermal imaging camera built for anti-UAV, border defense, and critical infrastructure monitoring. It integrates a 5th-generation FPA VOx uncooled detector with 640×512 resolution (384×288 optional), a 21–105mm continuous zoom lens, and advanced image processing to deliver detection ranges up to 8.6 km for vehicles and 3.4 km for humans. The system features a heavy-duty 30 kg CNC PTZ with 360° pan, ±45° tilt, and positioning accuracy of ±0.1°, supporting 255 presets and multiple cruising modes. Intelligent video analytics include cross-border/intrusion detection, target tracking, shot-point/fire detection, and configurable alarm thresholds. Housed in a one-piece aluminum alloy enclosure rated IP66, the camera operates from -25°C to +60°C (-40°C optional) and is suitable for seaports, airports, oilfields, highways, railways, and urban security deployments.

OVERVIEW

- VOx uncooled detector, 640×512 (384×288)
- NETD is less than 50mK (@25°C F1.0)
- SDE digital image processing, AGC, 2X digital amplification
- 10 pseudo color and B/W, B/W inverse
- Intelligent functions: cross-border/intrusion detection and target tracking
- 255 level alarm threshold can be setup
- Advanced algorithm support shot-point/fire detection and alert
- One integral aluminum alloy housing, water proof, IP66 weather proof, anti-dust

APPLICATIONS

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

TECHNICAL SPECIFICATION

THERMAL	
Spectral range	7.5~14μm
NETD	50mK (@25°C F1.0)
LENS	
Focal length	21 - 105mm
Field of view	18.5°x13.9° - 3.7°x2.8°
DETECTION	
Vehicle	8600m
Human	3400m
IDENTIFICATION	
Vehicle	2400m
Human	900m
PTZ	
Pan-tilt type	Omni-directional Pan-Tilt
Duty	30kg CNC PT
Pan range	0~360°
Tilt range	-45°~+45°
Pan speed	0.01°~60°/S
Tilt speed	0.01°/S ~30°/S
Accuracy	±0.1°
Preset count	255
Preset features	Support lens zooming and focusing preset
Cruising lines	6

TECHNICAL SPECIFICATION

PTZ	
Apple-skin scanning	1
Line cruising	1
ENHANCEMENTS	
Monitoring capability	Long range 24-hours monitoring
Image quality	Delicate and smooth images
Installation	Convenient for installation and application
Sensitivity	Higher sensitivity
Environmental effectiveness	Effective in all environments
Size and weight	Small size and low weight
Image processing	SDE digital image processing
AGC	Yes
Digital amplification	2X
Pseudo color modes	10
Black/white mode	Yes
Black/white inverse mode	Yes
Cross-border/intrusion detection	Yes
Target tracking	Yes
Alarm threshold levels	255
Fire detection	Shot-point/fire detection and alert

TECHNICAL SPECIFICATION

INTERFACE	
Ethernet connector	RJ45.10
Data rate	10/100 Base-T adaptive
Integrated video output	RS422/485
NETWORK	
Transport protocols	TCP/IP, UDP, IPv4/v6
Application protocols	HTTP, RTP, RTSP, NFS, DHCP, NTP, SMTP, SNMPv1/v2c/v3, UPNP, PPPoE, DNS, FTP
Standards	PSIA, ONVIF2.0, GB28181
ENVIRONMENT	
Operating temperature	-25°C~+60°C(-40°C Optional)
Storage temperature	-45°C~70°C
POWER	
Power supply	AC/DC24V
Reverse connection protection	Yes
CONSUMPTION	
Total consumption	180W
WEIGHT	
Total weight	≤25kg (include PTZ)

COMMERCIAL TECHNICAL DATA

DATASHEET · EN

DOCUMENT CONTROL SHEET

ISSUING AUTHORITY

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MATRIX CODES · SCAN TO OPEN

01	02	03	04
			
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