



MISSION CATALOG · CB-000027

AGT-TC6328 HD OUTDOOR THERMAL IMAGING CAMERA FOR BORDER SURVEILLANCE

The AGT-TC6328 is an ultra-long-range dual-FOV uncooled thermal imaging camera built for harsh outdoor surveillance.

Model AGT-TC6328

KEY BENEFITS

- Ultra-long-range dual-FOV thermal imaging with continuous IR optical zoom and detection up to 18 km for vehicles.
- High-sensitivity 640×512 UFPA VOx detector with 50 mK NETD for detailed imaging in fog, rain, snow, and darkness.
- Advanced AS+DOE optical design and 3CAM precision optomechanics for both wide-area search and long-range observation.
- Non-uniform image correction and SDE digital processing for low-noise images, AGC, 2× digital zoom, and 10 pseudo-color/B&W modes.
- Rugged integral aluminum alloy housing with IP66 sealing, PTA anti-corrosion coating, and built-in thermal balance for harsh outdoor use.
- Optional digital PTZ with 360° continuous pan, ±45° tilt, 80 presets, Pelco-P/D control, and high-precision variable speed.

Quote the Mission Catalog for Harsh Outdoor Use.

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DESCRIPTION

The AGT-TC6328 combines a fifth-generation uncooled UFPA vanadium oxide detector, advanced AS+DOE infrared optics, and 3CAM high-precision optomechanical design to provide long-range thermal imaging in a single rugged housing. With a 640×512 resolution sensor, NETD of 50 mK, and dual focal lengths of 95 mm and 285 mm, the camera offers detection ranges up to 18 km for vehicles and 8 km for humans, plus recognition ranges of 6 km and 2.6 km respectively. It features motorized zoom, auto focus, fast dual-FOV switching, SDE digital image processing, AGC, 2× digital amplification, and multiple pseudo-color/B&W modes. The integrated aluminum alloy enclosure is IP66-rated, waterproof, dustproof, and thermally balanced for reliable operation from -25 °C to +55 °C. An optional 50 kg-capacity digital PTZ supports 360° continuous pan, ±45° tilt, 80 presets, Pelco-P/D protocols, and variable-speed scanning.

OVERVIEW

- NETD 50 mK enhances imaging detail in foggy, rainy, and snowy conditions.
- Unique AS+DOE optical design and 3CAM high-precision optomechanical design suit both large-scale seeking and long-distance watching.
- Non-uniform image correction technology maintains stable working temperature without TEC, delivering good uniformity and dynamic range.
- SDE digital image processing provides noise-free images, 10 pseudo-color modes, and B/W switch.
- Digital-control PTZ enables 360° continuous rotation with no dead corner, stable operation, and low dithering.
- Integral aluminum alloy housing rated IP66 for waterproof, dustproof outdoor deployment.

APPLICATIONS

- Border surveillance and perimeter security
- Coastal and maritime monitoring
- Long-range target detection and recognition
- Critical infrastructure protection
- All-weather search and observation missions
- Port, airport, and remote-area security

TECHNICAL SPECIFICATION

OPTICAL	
Optical design	AS+DOE advanced optical design
Optomechanical design	3CAM high-precision design
Focal switch	dual focal fast switch
ENHANCEMENTS	
Operational temperature stability	stable
Startup time	<4 s
SDE	SDE digital image processing
Pseudo color modes	10 pseudo color and B/W, B/W inverse
AGC	yes
Digital amplification	2×
HOUSING	
Material	aluminum alloy
Waterproof	yes
Structure	integral single-window design
Coating	PTA coating, anti sea-water corrosion
Sealing / IP rating	IP66
Temperature controller	built-in temperature controller, thermal balance
Connector	aviation waterproof connector
PTZ	
Load	50 kg
Pan range	0~360°

TECHNICAL SPECIFICATION

PTZ	
Tilt range	-45°~+45°
Speed	0.01~30°/s
Speed control	high-precision variable speed control and locking
Presets	80
Lens memory	lens zoom/focus memory
Scan speed	0~30°/s
Scan modes	variable speed scanning, apple-peel scanning
Protocols	Pelco-P, Pelco-D
Baud rates	2400/4800/9600/19200 optional
CONSUMPTION	
Minimum power consumption	min. 40 W (PT included)
Maximum power consumption	max. 120 W (PT included)
INTERFACE	
RS-485	PELCO D protocol, 2400 bps
RS-232	optional
OSD setting	remote
Video output	PAL/NTSC
Power input	AC24V (DC12V option)
Connector	waterproof connector
ENVIRONMENT	
Working temperature	-25 °C~+55 °C (-40 °C optional)

TECHNICAL SPECIFICATION

ENVIRONMENT	
Storage temperature	-35 °C~+75 °C
Humidity	<90%
Anti-shock	0.2g (GB/T15211—2013 5.4 harshest level 2)
Anti-resistance	15g (GB/T15211—2013 5.3 harshest level 3)
Anti-lightening	power 4000 V, signal 2000 V
Anti-salty	pH 6.5~7.2, continuous spraying 48 h
Protection rate	IP66
DETECTION	
Vehicle	18000 m
Human	8000 m
RECOGNITION	
Vehicle	6000 m
Human	2600 m

COMMERCIAL TECHNICAL DATA

DATASHEET · EN

DOCUMENT CONTROL SHEET

ISSUING AUTHORITY

ORGANIZATION	Volls Global Inc
REGISTERED OFFICE	1207 Delaware Ave #5352
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COUNTRY	United States
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BRAND	Circuitbull®
PARENT ORGANIZATION	Volls Global · volls.us

MATRIX CODES · SCAN TO OPEN

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