



MISSION CATALOG · CB-000040

AGT-TC12618C WATERPROOF PTZ THERMAL IMAGING CAMERA FOR AQUACULTURE

The AGT-TC12618C is an ultra-long-range continuous zoom thermal imaging camera with 1280×1024 resolution, IP66 waterproof housing, and op...

Model AGT-TC12618C

KEY BENEFITS

- Ultra-long-range continuous zoom with 16.4 km vehicle detection
- 1280×1024 uncooled VOx thermal resolution with 50 mK NETD
- All-weather imaging through fog, dirt, rain, and snow
- IP66 integral aluminum alloy housing with anti-seawater corrosion coating
- 360° continuous rotation PTZ with high-precision variable speed control
- Advanced AS+DOE optics and 3CAM high-precision optomechanical design
- SDE digital image processing with 10 pseudo-color and B/W modes
- Intelligent video analytics and remote maintenance capabilities

DESCRIPTION

The AGT-TC12618C is a waterproof PTZ thermal imaging camera engineered for aquaculture and demanding outdoor environments. Built around a 5th-generation uncooled UFPA VOx detector with 1280×1024 resolution and a 30–180 mm continuous zoom lens, it delivers NETD 50 mK thermal sensitivity across a 12 µm spectral range. The system provides vehicle detection up to 16.4 km and human detection up to 5.8 km, with optical zoom, auto focus, and AS+DOE advanced optical design combined with 3CAM high-precision optomechanics. The camera integrates SDE digital image processing, AGC, 10 pseudo-color modes, and 1–8× digital amplification to maintain clear imagery in fog, rain, snow, and darkness. Its integral aluminum alloy housing with PTA coating achieves IP66 sealing, anti-seawater corrosion, and built-in thermal management for reliable all-weather operation. An optional digital PTZ supports 360° pan, ±45° tilt, 0.01–30°/s variable speed, and 80 presets with lens memory and scanning functions. Intelligent on-board analytics include intrusion, out-of-bounds, entry/exit area, and motion detection, while remote maintenance features provide health monitoring, fault query, self-check, restart, and online upgrade capabilities. Interfaces include RJ45, remote OSD, PAL/NTSC video output, and AC/DC 24 V with anti-reverse protection.

OVERVIEW

- NETD 50 mK enhances imaging details in foggy, rainy, and snowy conditions
- AS+DOE optical design and 3CAM high-precision optomechanics suit large-scale seeking and long-distance watching
- Non-uniform image correction technology with stable working temperature and no TEC
- SDE digital image processing delivers low image noise with 10 pseudo colors and B/W switch
- Digital control PT enables 360° continuous rotation with no dead corner and small dithering
- Integral aluminum alloy housing rated IP66 for waterproof and dustproof outdoor use

APPLICATIONS

- Aquaculture monitoring and perimeter protection
- Coastal and maritime surveillance
- Long-range border and critical infrastructure security
- All-weather outdoor surveillance and search

TECHNICAL SPECIFICATION

PTZ	
Speed	01~30°/S; 80 presets with lens zoom/focus memory; variable speed scanning 0~30°/S; apple peel scanning
POWER	
Consumption (PT included)	min 40W, max 120W
weight (PT included)	≤45kg
ENVIRONMENT	
Operating Temperature	-25°C~+55°C (-40°C optional)
Storage Temperature	-35°C~+75°C
Humidity	<90%
Lightning Protection	Power 4000V, signal 2000V
Protection Rating	IP66

COMMERCIAL TECHNICAL DATA

DATASHEET · EN

DOCUMENT CONTROL SHEET

ISSUING AUTHORITY

ORGANIZATION	Volls Global Inc
REGISTERED OFFICE	1207 Delaware Ave #5352
LOCALITY	Wilmington, DE 19806
COUNTRY	United States
POINT OF CONTACT	info@circuitbull.com
BRAND	Circuitbull®
PARENT ORGANIZATION	Volls Global · volls.us

MATRIX CODES · SCAN TO OPEN

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