### Thermal & Optical IP Camera 3.6 mm

# GD-TI-AP4503T





















Type: Bullet - Thermal Imaging - Camera

Item Code: GD-TI-AP4503T EAN CODE: 4260573064816

### **PROFESSIONAL**

The PROFESSIONAL product line comprehensively covers modern video systems and offers versatile solutions for various areas of application.

## **Highlights**

#### **Objekt Classification**



This technology employs a highly advanced deep learning algorithm that can discern whether the alarm was triggered by a human, a vehicle or some other object.



#### **Deep Learning**

Deep Learning is inspired by the complex structure of the human brain. This innovative method allows processing of information and performing corresponding actions based on analysis.

#### **Features**

- Reduction of unwanted alarms (false alarms) by classifying target objects using deep learning algorithms. This significantly reduces false alarms generated by objects other than people or vehicles. This makes finding events easier and saves hard drive capacity
- Audio Communication & Alarm Input / Output
- Picture in Picture Partial image of infrared channel on the full image of optical channel

- Dual Streaming with 1 infrared channel and 1 optical channel
- 0 Lux: Integrated LED IR Illuminator viewable distance up to 30m
- White light flash and audible alarm deterrent function

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## **Specifications GD-TI-AP4503T**

Thermal module

Thermal Sensor: Vanadium Oxide Uncooled Focal Plane Array

Resolution (Thermal): 256 x 192

IFOV: 3.33 mrad

NETD: < 40 mk (@25° C, F=1.0)

Response Waveband: 8 µm to 14 µm

Detector Pitch: 12 μm
Focal Length (IR): 3.6 mm

Viewing Angle (IR): 50° x 37.2° (HxV)

MOD (Min. Object Distance): 0.5 m

Camera

Image Sensor: 1/2.7" progressive Scan CMOS

Video Resolution: 2688 × 1520

Sensitivity Colour: 0.0089Lux @ F1.6 (AGC ON)
Sensitivity B/W: 0.0035 Lux @ F2.25, (AGC ON)

Shutter Speed: 1 ~ 1/100,000 s

Lens

Lens Focal Length: 4.3 mm

Iris F-Number: F1.6

Field of View: 84° (horizontal), 45° (vertical), 99° (diagonal)

Illuminator

Max. IR Distance: Up to 30 m
White Light Distance: Up to 30 m
White LED: Alarm/ Off

Video

Wide Dynamic Range: 120 dB

Day/Night Switch: Color, BW, Auto

**Audio** 

Audio Compression: G722.1/G711ulaw/G711alaw/G726/MP2L2/PCM

General

Measurement option: Support 3 temperature measurement rule types, 21 rules (10 points, 10 regions and 1 line)

Object Temperature Range: - 20°C to 150°C

Accuracy: ± 8°C

DRI Range: Detection Range, Vehicles 1.4 m x 4.0 m: 460 m

Detection Range, Humans 1.8 m x 0.5 m: 150 m Recognition Range, Vehilces 1.4 m x 4.0 m: 112 m Recognition Range, Humans 1.8 m x 0.5 m: 38 m Identification Range, Vehicles 1.4 m x 4.0 m: 56 m Identification Range, Humans 1.8 m x 0.5 m: 19 m

Smart Function Range: VCA Range, Vehicles 1.4 m x 4.0 m: 76 m

VCA Range, Hu mans 1.8 m x 0.5 m: 29 m

Temperature Measurement, Object 1 x 1 m: 58 m Temperature Measurement, Object 0.2 x 0.2 m: 12 m

Accessories included: Junction box

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Network

Users: 3 Levels: Administrator, Operator and User

Number of Clients: Up to 20 simultaneously
Video Compression: H.264, H.265, MJPEG

SD Memory: Micro SD/SDHC/SDXC card slot with ANR (up to 256G), NAS (Support NFS, SMB/CIFS)

Client software: C-WERK Viewer, SCMS, IOS App, Android App (SCMS)

Web Browser: Plug-in required live view: Internet Explorer 11

Non Plug-in live view and service: Chrome 57.0+, Mozilla Firefox 52+

Frame Rate: Main Stream:

Thermal: 25 fps (1280 × 720, 704 × 576, 640 × 512, 320 × 240) Optical: 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)

Sub-stream:

Thermal: 25 fps (704 × 576, 640 × 512, 320 × 240) Optical: 50 Hz: 25 fps (704 × 576, 352 × 288) 60 Hz: 30 fps (704 × 480, 352 × 240)

Network Protocol: TCP/IP, IPv4/IPv6, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP,

SMTP, IGMP, 802.1X, QoS, UDP, PPPoE, SNMP

Cyber Security: 3 levels of user management: admin, operator, user, AES Encryption for Password Protection,

Complicated Password, HTTPS (SSL) Login Authentication, Basic and digest authentication for HTTP/HTTPS, 802.1X authentication (EAP-TLS), 802.1X authentication (EAP-MD5), Watermark, IP Adress Filter, WSSE and digest authentication for ONVIF, RTP/RTSP over HTTPS, Control timeout settings, Security audit log, SNMP V2, SNMP V3, TLS 1.1, TLS 1.2, TLS 1.2 with updated cipher suites including AES 256 encryption. Brute Force Delay Protection, Signed Firmware, Secure

Boot by software check

I/O Interface

Video Outputs: 1x CVBS (1 Vcc) BNC

Audio Input/Output: 1-ch audio input and 1-ch audio output

Alarm Input/Output: 2, 2

Network Interface: 1x 10, 100 Base T, TX PoE+ (RJ-45)

Serial Interface(s): 1x RS-485

**Intelligent Functions** 

Intrusion Detection: Enter and loiter in a pre-defined virtual region

Line Crossing: Cross a pre-defined virtual line

Region Entrance: Enter a pre-defined virtual region from the outside place

Region Exiting: Exit from a pre-defined virtual region

Event Source: Video tampering, network disconnected, IP address conflicted, HDD full, HDD error, illegal login,

motion detection

Event Action: Recording: Pre-event, post-event memory card and/or network storage. Picture upload: FTP,

HTTP and NAS. Trigger E-mail notification: HTTP, ISAPI. Audio alarm, white light alarm, alarm

output and notification to C-WERK VMS. Events are depending on schedule settings.

Sound Alarm: 2 types of audible alarm (VCA and Temperature)

2 preset voice alerts (one for each)

6 importable user-defined voice alerts (6 options shared in the two types)

Visual Alarm: White light alarm with adjustable flashing frequencies

**Approvals** 

Protection Rating: IP67 (IEC 60529-2013)

Standard: ONVIF (Profile S, Profile G), SDK/API

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**Environmental** 

Operating Temperature:  $-40 \,^{\circ}\text{C} \,^{\sim} \, 65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F} \,^{\sim} \, 149 \,^{\circ}\text{F})$ Humidity: Less than 95%, non condensing

**Electrical** 

Surge Protection: TVS 4000V Lightning Protection, Surge Protection and Voltage Transient Protection

Supply Voltage: 12 VDC, 24 VAC, PoE (IEEE 802.3af)

Power Consumption: Max. 8.2 W

Mechanical

Dimensions:  $358 \times 114 \times 115 \text{ mm} (14.1 \times 4.47 \times 4.53 \text{ inch})$ 

Weight: 1550 g (3.41 lb)

**Packaging** 

Package Dimensions: 395 x 195 x 158 mm (15.6 x 7.7 x 6.2 inch)

Package Weight: 1900 g (4.2 lbs)

#### **Accessories**





GD-BR-AMC03

GD-BR-AML01

### Guarantee

All cameras in the "SMART", "PRO" and "PREMIUM" product lines have an extended warranty period of 5 years on electronic parts, mechanical wear and tear on moving parts is not included. Please note our general delivery terms and conditions.