**GRUNDIG**

Type: Bullet - Thermal Imaging - Camera
Item Code: GD-TI-AT3510T
EAN CODE:

## PREMIUM

The PREMIUM product line offers versatile solutions with unique and unparalleled features.

## Highlights

### Object 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.

## Features

- Deep Learning - bahavior analysis based on deep leraning algorithm like line crossing, region entrance & exit , intrusion

- Audio Communication & Alarm Input / Output

- PoE 802.3af

- Dual Streaming with 1 infrared channel and 1 optical channel

- WDR (Wide Dynamic Range) for extreme backlight situations

- Picture in Picture - Partial image of infrared channel on the full image of optical channel

## Specifications GD-TI-AT3510T

| Thermal module | |
|---|---|
| Thermal Sensor: | Vanadium Oxide Uncooled Focal Plane Array |
| Resolution (Thermal): | 640 x 512 |
| IFOV: | 1.2 mrad |
| NETD: | < 20 mk (@25° C, F=1.0) |
| Detector Pitch: | 12 µm |
| Focal Length (IR): | 10 mm |
| Viewing Angle (IR): | 45.1° x 35.7° (HxV) |
| MOD (Min. Object Distance): | 1.5 m |

| Camera | |
|---|---|
| Image Sensor: | 1/2.7" progressive Scan CMOS |
| Video Resolution: | 2688 × 1520 |
| Sensitivity Colour: | 0.0089Lux @ F1.6 (AGC ON) |
| Shutter Speed: | 1 ~ 1/100,000 s |

| Lens | |
|---|---|
| Lens Focal Length: | 4.3 mm |
| Field of View: | 83.7° ~ 43° (H x V) |

| Illuminator | |
|---|---|
| Max. IR Distance: | Up to 30 m |

| 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: 1278 m<br>Detection Range, Humans 1.8 m x 0.5 m: 417 m<br>Recognition Range, Vehilces 1.4 m x 4.0 m: 319 m<br>Recognition Range, Humans 1.8 m x 0.5 m: 104 m<br>Identification Range, Vehicles 1.4 m x 4.0 m: 160 m<br>Identification Range, Humans 1.8 m x 0.5 m: 52 m<br><br>The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015. |
| Smart Function Range: | VCA Range, Vehicles 1.4 m x 4.0 m: 300 m<br>VCA Range, Humans 1.8 m x 0.5 m: 130 m<br>Temperature Measurement, Object 0.2 x 0.2 m:29 m<br>Temperature Measurement, Object 0.5 x 0.5 m: 72 m<br>Fire Detection, Object 0.2 x 0.2 m: 116 m |

## Frame Rate

| | |
|---|---|
| Main Stream: | Thermal: 25 fps (1280 × 720, 704 × 576, 640 × 512, 352 × 288)<br>Optical: 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)<br>60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) |
| Sub- Stream: | Thermal: 25 fps (704 × 576, 640 x 512, 384 × 288)<br>Optical: 50 Hz: 25 fps (704 × 576, 352 × 288)<br>60 Hz: 30 fps (704 × 480, 352 × 240) |

## Network

| | |
|---|---|
| Video Compression: | H.264, H.265, MJPEG |
| SD Memory: | Micro SD/SDHC/SDXC card slot with ANR (up to 512G), NAS (Support NFS, SMB/CIFS) |
| Client software: | C-WERK Viewer, SCMS, IOS App, Android App (SCMS) |
| Network Protocol: | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SFTP, SNMP, SRTP |
| 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

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

## Approvals

| | |
|---|---|
| Protection Rating: | IP67 (IEC 60529-2013), IK10 (IEC 62262:2002), NEMA 4X (NEMA 250-2018) |
| Standard: | ONVIF (Profile S, Profile G, Profile T, Profile M), SDK/API |

## Environmental

| | |
|---|---|
| Operating Temperature: | -40 °C ~ 70 °C (-40 °F ~ 158 °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. 13.5 W |

## Mechanical

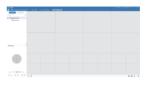| | |
|---|---|
| Dimensions: | 376,1 x 119,1 x 118,1 mm (14,81 x 4,69 x 4,65 inch) |
| Weight: | 1890 g (4.17 lb) |

## Accessories



GD-CW-VIEWER



GD-CW-FINDER



GD-SW-SCMS



GD-HW-SD-128GB



GD-HW-SD-256GB



GD-BR-AMC03



GD-BR-AML01



GD-BR-AML01AC

## 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.