

# IPTECHVIEW Universal Camera

[ S1-TRT-F3.5-THERMAL ]

## Bi-Spectrum Thermal/Optical HD IR Intelligent Turret Cloud Camera



IPTECHVIEW S1-TRT-F3.5-Thermal Camera features a 3.5 - 7mm thermal lens, 4-8mm optical lens. With smart IR up to 115ft, human/vehicle, smoking, smoke & flame, fire point detection, and Intelligent Analytics: intrusion, line crossing, loitering, wrong-way, people counting, enter/leave area detection, smart motion detection. With precise temperature monitoring from -4°F to 302°F, this IP66-rated camera is built for reliable performance in demanding security environments.



- Easy Plug and Play and Cloud Management
  - > No fixed IP or port forwarding needed
  - > Full access to GUI through IPTECHVIEW
  - > Rich monitoring & alerting rules
- 256 x 192 resolution, 12μm, VOx UFPA, NETD ≤ 50 mK
- Lens options: Thermal 3.5-7mm fixed; visible 4-8mm fixed
- Detection Capabilities: Human/vehicle, smoking, smoke & flame, fire point detection
- Intelligent Analytics: intrusion, single/double line crossing, loitering, wrong-way, people counting, enter/leave area detection, smart motion detection
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature Monitoring & Alarm: -4°F to 302°F, Accuracy: ±2°C / ±2%
- Built-in mic, speaker, and strobe light
- Supports sound-light alarm
- Smart IR range up to 164 feet
- Supports I/O alarm, RS485, built-in SD card slot (card not included)
- Up to 512GB Micro SD card
- Power supply: 12 VDC/24 VDC, PoE

Compatible with IPTECHVIEW and any VMS that supports



\* **NDAA-Compliant Camera.** Connectivity software & cloud design developed in the USA (MSTAR SOC).

# Specifications

| Camera              | S1-TRT-F3.5-Thermal                                  |                                                                                |
|---------------------|------------------------------------------------------|--------------------------------------------------------------------------------|
|                     | Thermal                                              | Visible                                                                        |
| Image Sensor        | Vanadium Oxide Uncooled Focal Plane Arrays           | 1/2.7" CMOS                                                                    |
| Resolution          | 256(H) × 192(V), Image can be scaled up to 704 × 576 | 2560(H) × 1440(V)                                                              |
| Pixel Pitch         | 12μm                                                 | N/A                                                                            |
| Spectral Range      | 8 to 14μm                                            | N/A                                                                            |
| NETD                | ≤ 50mK                                               | N/A                                                                            |
| Min. Illumination   | N/A                                                  | Color: 0.05Lux @(F1.6, AGC ON), B/W: 0.005Lux @(F1.6, AGC ON), 0Lux with IR on |
| Shutter Speed       | N/A                                                  | 1/5 to 1/20,000s                                                               |
| Lens Type           | Fixed lens                                           | Fixed lens                                                                     |
| Focal Length        | 3.5 mm, 7 mm optional                                | 4 mm, 8 mm optional                                                            |
| Max. Aperture       | F1.0                                                 | F1.6 / F2.0                                                                    |
| Focus Control       | Fixed local                                          | Fixed local                                                                    |
| Field of View (FOV) | 3.5 mm H: 48°, V: 36°<br>7 mm H: 24°, V: 18°         | 4 mm H: 92°, V: 46°<br>8 mm H: 40°, V: 20°                                     |

| Intelligent Analytics     |                                                                                                                                                                                            |                                                                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AI Multi-Target           | Human and vehicle detection.                                                                                                                                                               | Human and vehicle detection.                                                                                                                                                               |
| Intelligent analysis      | Intrusion, Single-line Crossing, Double-line Crossing, Loitering, Wrong-Way detection, Enter Area, and Leave Area; Supports alarm triggering by specified target types (human and vehicle) | Intrusion, Single-line Crossing, Double-line Crossing, Loitering, Wrong-Way detection, Enter Area, and Leave Area; Supports alarm triggering by specified target types (human and vehicle) |
| Smoking Detection         | Support                                                                                                                                                                                    | N/A                                                                                                                                                                                        |
| Smoke and Flame Detection | N/A                                                                                                                                                                                        | Support                                                                                                                                                                                    |
| Fire Spot Detection       | Support                                                                                                                                                                                    | N/A                                                                                                                                                                                        |
| People Counting           | Support                                                                                                                                                                                    | Support                                                                                                                                                                                    |

| Video             |                                                                |                                                                |
|-------------------|----------------------------------------------------------------|----------------------------------------------------------------|
| Video Main Stream | D1 (704×576)                                                   | 2560×1440, 2304×1296, 1920×1080, 1280×720                      |
| Video Sub Stream  | D1, CIF, 256×192                                               | D1, VGA @25fps                                                 |
| Bit Rate Control  | CBR/VBR                                                        | CBR/VBR                                                        |
| Bit Rate          | Main Stream: 100 Kbps to 3 Mbps, Sub Stream: 10 Kbps to 3 Mbps | Main Stream: 100 Kbps to 12 Mbps Sub Stream: 10 Kbps to 6 Mbps |
| Smart Encode      | Support                                                        | Support                                                        |
| Audio Compression | G.711 A-law, G.711 μ-law, RAWPCM                               | G.711 A-law, G.711 μ-law, RAW PCM                              |

| Image                |                                                                                                                                                                             |                                                    |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Image Setting        | Brightness, Contrast, Sharpness                                                                                                                                             | Brightness, Saturation, Contrast, Sharpness        |
| Scene Mode           | Mirror                                                                                                                                                                      | Indoor, Outdoor, Mirror                            |
| Pseudo-color Setting | Up to 17 colors (White-hot / Black-hot / Rainbow / Iron red /HSV /Bone / Cool / Copper / Fire-hot / Pink / Spring / Summer / Autumn / Winter / Jet / Flame / Rose - Bengal) | N/A                                                |
| FFC Control          | Auto / Manual                                                                                                                                                               | Auto / Manual                                      |
| Gain Control         | Auto / Manual                                                                                                                                                               | Auto / Tungsten / Fluorescent / Daylight / Shadow/ |
| White Balance        | N/A                                                                                                                                                                         | Auto / Day mode / Night mode / Timer               |
| Day/Night            | N/A                                                                                                                                                                         | 2D/3D DNR                                          |
| Noise Reduction      | 2D/3D DNR                                                                                                                                                                   | WDR, HLC, BLC                                      |
| Image Enhancement    | N/A                                                                                                                                                                         | True WDR 120dB                                     |
| Wide Dynamic Range   | N/A                                                                                                                                                                         | Up to 8 OSD                                        |
| OSD                  | Up to 8 OSD                                                                                                                                                                 | Up to 4 areas                                      |
| Privacy Masking      | Up to 4 areas                                                                                                                                                               | 850 nm, IR Range: 4mm - 114.8 ft, 8mm - 164.04 ft  |
| Illuminador          | 850 nm, IR Range: 4mm - 114.8 ft, 8mm - 164.04 ft                                                                                                                           |                                                    |

| Thermal Function      |                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Temperature Range     | (-4°F to 302°F)                                                                                                                   |
| Accuracy              | ±2°C / ±2%                                                                                                                        |
| Temperature Detection | 3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line).                            |
| Temperature Display   | Display in the lower left corner, follow the cursor display of the highest temperature, lowest temperature or average temperature |
| Image Fusion          | Fusion view of thermal view and overlaid details of the optical channel                                                           |

| Event          |                                                                                                              |
|----------------|--------------------------------------------------------------------------------------------------------------|
| Alarm Triggers | IVS, Temperature anomaly, Motion detection, Alarm Input, Disk alarm, Network alarm, Abnormal sound detection |
| Event Actions  | Alarm output, Alarm record, SMTP, FTP upload, Flashing light alarm, Audible alarm output                     |

| Network                |                                                                                                                                 |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Protocols              | IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPOE, RTSP/RTP/ RTCP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, 802.1x, SNMP, Multicast |
| Compatible Integration | ONVIF (Profile S/T/G/M), CGI, SDK                                                                                               |
| Max Concurrent Streams | 10 channels                                                                                                                     |
| User/Host Level        | 32+ users, 3 levels: Administrator, Operator, Media user                                                                        |
| Security               | IP address filter, HTTPS, Illegal login lock, IEEE 802.1x                                                                       |
| Web Viewer             | <IE11, Chrome, Firefox, Microsoft Edge                                                                                          |

| Interface           |                                               |
|---------------------|-----------------------------------------------|
| Network Interface   | 1 × Ethernet (10/100 Base-T), RJ-45 connector |
| Built-in Microphone | Supported                                     |
| Built-in Speaker    | Supported                                     |
| Alarm Interface     | 1ch input, 1ch output                         |
| Audio Interface     | 1ch input, 1ch output                         |
| RS-485              | 1                                             |
| SD Card Slot        | Support Micro SD card, up to 512GB            |
| Reset Button        | Supported                                     |

| General                          |                                                                                                                                                    |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Language                         | English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English |
| Power Supply                     | 12 VDC / 24 VDC / PoE (802.3af)                                                                                                                    |
| Power Consumption                | Max 10 W                                                                                                                                           |
| Working Temperature and Humidity | -40°F to 140°F, Less than 95% RH                                                                                                                   |
| Certifications                   | CE-EMC - EN 55032, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC 47 CFR Part 15 Subpart B                             |
| Ingress Protection               | IP66                                                                                                                                               |
| Material                         | Metal                                                                                                                                              |
| Dimensions                       | ø5.51 × 4.64 inch                                                                                                                                  |
| Net Weight                       | 2.27 lb                                                                                                                                            |

| DORI Lens Distance |                                |                               |
|--------------------|--------------------------------|-------------------------------|
| Detection (Human)  | 4 mm: 236.22 ft, 8 mm: 479 ft  | 3.5 mm: 479 ft, 7 mm: 958 ft  |
| Observe            | 4 mm: 94.49 ft, 8 mm: 191.6 ft | 3.5 mm: 249 ft, 7 mm: 3588 ft |
| Recognize (Human)  | 4 mm: 47.24 ft, 8 mm: 95.8 ft  | 3.5 mm: 118 ft, 7 mm: 239 ft  |
| Identify (Human)   | 4 mm: 23.62 ft, 8 mm: 47.9 ft  | 3.5 mm: 59 ft, 7 mm: 118 ft   |

# Accessories

|                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| S1-ACC-TH-CBK645G<br>Junction Box                                                   | S1-ACC-TH-CBK101<br>Pole Mount Bracket                                              | S1-ACC-TH-CBK102<br>Corner Mount Bracket                                            | S1-ACC-TH-CBK402<br>Ceiling Mount Bracket                                             | S1-ACC-TH-CBK206<br>Bracket Mount Adapter                                             | S1-ACC-TH-CBK501<br>Wall Mount Bracket                                                | S1-ACC-TH-CBK502<br>Wall Mount Bracket                                                |