# TI30|TI60

## UAV Thermal Imaging Cameras

**ULIRVISION TI30 & TI60** are thermal imaging modules designed for UAV applications. With small size and light weight, they offer surprising thermal images & videos with temperature on each spot, serve your purposes in the air.

### Features

384×288|640×480, 17μm uncooled FPA detector

Auto tracking of hot spots and showing the temperature values

Thermal images, temperature and temperature data flows are saved

Light weight, less than 150g

Compatible with the main communication protocol of UAV

### Applications

UAV & aircraft & robot applicationOnline monitoring system

Automation security

ULIRVISION

## Technical Specifications

| Item | TI30 | TI60 |
|---|---|---|
| **Detector Data** | | |
| Type | Uncooled FPA | |
| IR resolution | 384×288 | 640×480 |
| Pixel pitch | 17μm | |
| Spectral range | 7.5～14μm | |
| NETD/Sensitivity | 65mK | |
| **Lens** | | |
| FOV/Focal distance | 24°×18°/15mm | 24°×18°/25mm |
| Minimum imaging distance | 50cm | |
| IFOV | 1.3mrad | 0.65mrad |
| Focus | Manual | |
| **Image Performance** | | |
| Image enhancement | IVE image enhancement algorithm | |
| Frequency | 50Hz/60Hz | |
| Digital zoom | 2X、4X | |
| Color palletes | 10 palletes(including iron, rainbow, white hot and black hot etc.) | |
| **Measurement** | | |
| Temperature range | -20℃～+150℃ | |
| Temperature accuracy | ±2℃/±2%(reading) | |
| Highest temperature tracking | Display the location and value of the highest temperature point | |
| Measurement correction | Auto | |
| Emissivity correction | Adjustable from 0.01 to 1.0 or selected from list of materials | |
| Background temperature correction | Auto | |
| Atmospheric transmissivity correction | Auto | |
| Fliter or window transmittance | Auto | |
| Setting function | Date/time, temperature unit ℃/℉/K, language | |
| **Data Storage** | | |
| Temperature data | Customized UDS, use IRSee to analyze | |
| Temperature data flow | Customized UTD, use IRSee to playback, freezable、loop、image processed when playing | |
| Image format | JPG format | |
| Video format | AVI format, H.264 compression | |
| SD card | 32G high speed TF card | |
| Storage control | Serial port command, level trigger or key trigger is optional | |
| Report | Word format, customized format function | |
| **Interfaces** | | |
| Power | Yes | |
| Video output | CVBS | |
| Control port | RS232 | |
| Installation Interface | UNC 1/4"-20 standard interface, M3 treaded joint | |
| **Power System** | | |
| DC supply | DC: 12V | |
| Power consumption | <3.6W | |
| **Environment Parameters** | | |
| Operation temperature range | -30℃～+60℃ | |
| Storage temperature range | -40℃～+70℃ | |
| Humidity | ≤95%(Non-condense) | |
| EMC | CE/FCC | |
| Vibration | 2G(IEC60068-2-6) | |
| Shock | 25G(IEC60068-2-29) | |
| Encapsulation | IP54(IEC60529) | |
| **Physical Data** | | |
| Size(L×W×H) | 95mm×55mm×60mm | |
| Weight | ≤150g(with 25mm athermal lens) | |
| **Packing** | | |
| Standard | Thermal imaging camera with 25mm athermal    lens, intergation cable, software CD, warranty card, certificate, calibration | |