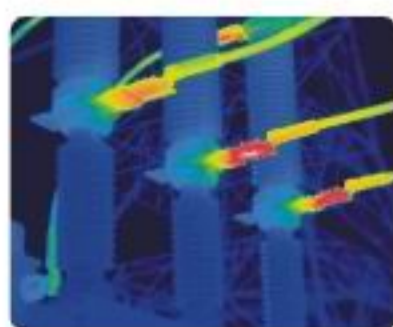
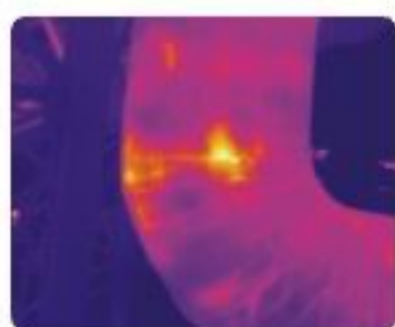
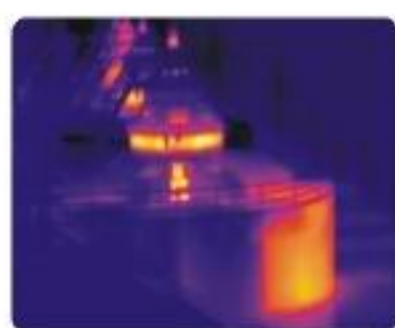


Thermal Imaging Cameras

TI170 / TI175 / TI390 / TI395



Thermal Imaging Cameras

TI170 | TI175 | TI390 | TI395



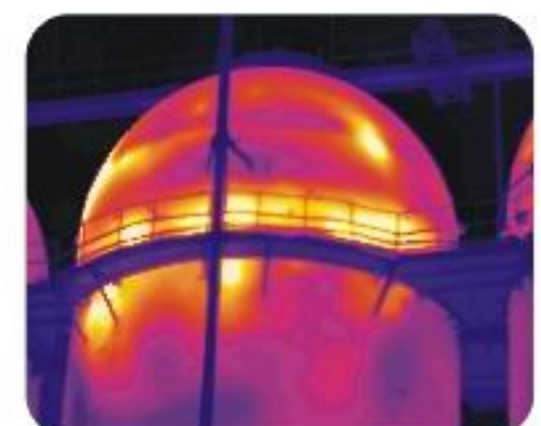
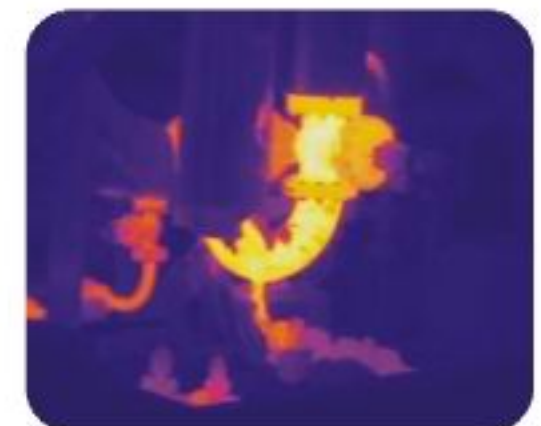
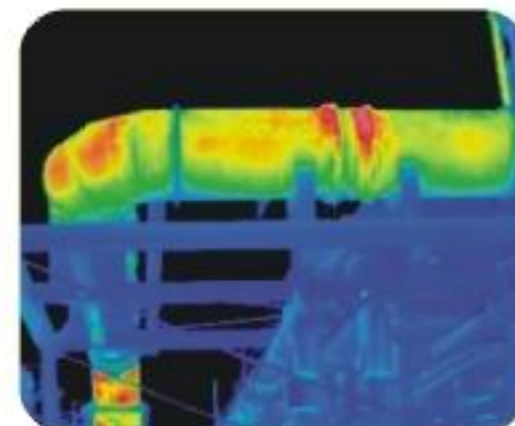
ULIRvision TI170|TI175|TI390|TI395 are the third generation thermal imaging system products. With cutting-edge infrared technology, including high sensitivity IR detector(25 μ m pixel pitch, NETD<65mK) and ergonomic design, they are the ideal choice for professional thermographers to have the most efficient instrument for maintenance inspections.

ULIRvision TI170|TI175|TI390|TI395 are affordable, easy-to-operate high performance thermal images that offer accurate temperature measurements at the safe distances. They are integrated 2.0 megapixel camera to assist in reporting, thermal and visual images taken can be stored in standard JPEG formats, user obtain easily the thermograph results from the multi-function IRSee analysis software. With Auto/Motor focus features, they deliver one-hand operation to make the inspection process quickly and conveniently.

ULIRvision TI170|TI175|TI390|TI395 have a wide range temperature measurement to satisfy variety of thermograph applications. TI170|TI390 are special for Building application, TI175|TI395 are special for kinds of industry applications, the difference is from IR detector level, temperature measurement, and other features. With crisp thermal image quality, they enable you to identify the small temperature difference that could cause big problems.

Applications

- Building Diagnostics
- Electrical/Mechanical Inspection
- Research & Development
- Automation Applications
- Preventative & Predictive Maintenance



Features

- **Excellent thermal image and high accuracy temperature measurement**

± 2% accuracy, 50mK thermal sensitivity to provide reliable performance.

- **Folding and 270° rotatable display**

Folding and rotatable display delivers clear view in any position during thermographing.

- **Auto/Motor focus for one-hand operation**

With auto/motorized focus, user can focus any thermal image quickly and easily.

- **Laser pointer**

Helps user to locate objects easily during operation.

- **Bright LED light**

Allows user to operate thermal images in poor light environment

- **Built-in digital camera**

2.0 megapixel resolutions provide clear visual images to aid in reporting.

- **Wide temperature measurement range**

Covering a standard temperature range of -20°C to 600°C, up to 1200°C for optional.

- **Built-in microphone to record 40sec voice annotation**

Allows user to take quick voice comments on every thermal image, the voice annotation will be stored with the thermal images together.

- **Wide-angle and telephoto IR lens**

With clipping IR lens design, TI170|TI175|TI390|TI395 provide a larger image section and a quick overview with wide-angle lens, and more details image for measurement objects with the telephoto lens.

- **Scalable P-I-P and Thermal fusion**

Overlay thermal and visual images for easy location and clear documentation.

- **Automatic Hot/Cold/Average temperature detection**

Critical temperature conditions are shown with the automatic Hot/Cold/Average spot recognition. Uninterrupted error identification on site is therefore ensured.

- **Real-time thermal video transfer to PC via USB, and remote transfer via MSN and Skype**

Multi-transferring real-time thermal video offers fast and convenient thermograph results.

- **Intuitive and easy operating menu**

One-hand operation with intuitive menu offers a fast and simple operation for targeted maintenance applications.

- **New generation IRSee analysis software**

Free IRSee analysis software comes with TI170|TI175|TI390|TI395, IRSee allows users to analyse thermal images and visible images, and export all information into Microsoft Office Word, and Users can edit reports easily.

IR-Fusion Viewing Options



Infrared



PIP



Superpose



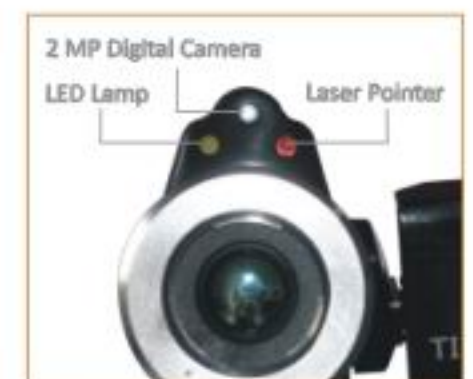
Fusion



Visual



Folding, 270 rotatable LCD



Easily putting on IR lens



IR lenses for application choice



Free IRSee software for analysis & reporting

Technical Specifications

| Item | TI170 | TI175 | TI390 | TI395 |
|--|--|---|---|---|
| ● Detector Data | | | | |
| — Detector type | Uncooled FPA, 160 × 120 pixels | | Uncooled FPA, 384 × 288 pixels | |
| — Pixel pitch | 25 μm | | 25 μm | |
| — Spectral range | 8 ~ 14 μm | | 8 ~ 14 μm | |
| — IFOV/Mini Focus | 21° × 16° / 0.15m (standard lens) 42° × 32° / 0.1m (wide lens, optional) 10° × 8° / 1m (telephoto lens, optional) | | 21° × 16° / 0.4m (standard lens) 38° × 28° / 0.3m (wide lens, optional) 11° × 8.5° / 1.2m (telephoto lens, optional) | |
| — Spatial resolution(IFOV) | 2.3mrad | | 1.2mrad | |
| — Sensitivity/NETD | <50mK@+30℃ | | <50mK@+30℃ | |
| ● Image Performance | | | | |
| — Image Display | 3.2" 270° tiltable LCD | | 3.2" 270° tiltable LCD | |
| — Image modes | Thermal image, visual image, thermal fusion, picture-in-picture, thumbnail gallery | | Thermal image, visual image, thermal fusion, picture-in-picture, thumbnail gallery | |
| — Thermal fusion | IR image shown above, below or within temp interval on visual image | | IR image shown above, below or within temp interval on visual image | |
| — Picture in Picture | Resizable and movable IR area on visual image | | Resizable and movable IR area on visual image | |
| — Frequency | 50Hz(PAL)/60Hz(NTSC) | | 50Hz(PAL)/60Hz(NTSC) | |
| — Focus | Auto/Motor | | Auto/Motor | |
| — Electronic Zoom | 2x | | 4 x(Expand to 8x) | |
| — Digital Zoom | 1-2x Continuous | | 1-4x Continuous (Expand to 8x) | |
| — Visual camera | 2 mega pixel | | 2 mega pixel(Up to 3 mega pixels) | |
| — Spotlight | 10cd/m ² | | 10cd/m ² | |
| ● Measurement | | | | |
| — Temperature range | -20℃ ~ 100℃ (Building) | | -20℃ ~ 100℃ (Building) | |
| | | -20℃ ~ 250℃ (Industrial) -20℃ ~ 600℃ (optional A) -20℃ ~ 1200℃ (optional B) | | -20℃ ~ 250℃ (Industrial) -20℃ ~ 600℃ (optional A) -20℃ ~ 1200℃ (optional B) |
| — Temperature accuracy | ± 2℃ or ± 2% of reading | | ± 2℃ or ± 2% of reading | |
| — Spotmeter | 4 adjustable spot | | 4 adjustable spot | |
| — Area | 3 adjustable boxes with max./min./average | | 3 adjustable boxes with max./min./average | |
| — Line profile | Horizontal/vertical | | Horizontal/vertical | |
| — Isotherms analysis | Detect high/low temperature/interval | | Detect high/low temperature/interval | |
| — Dew point alarm | Yes | | Yes | |
| — Hot/cold spot Auto detection | No | | No | |
| — Emissivity correction | Max/Min/Average temp | | Max/Min/Average temp | |
| — Alarm | Variable from 0.01~1.0 | | Variable from 0.01~1.0 | |
| — Multiple language menu | Voice and Color | | Voice and Color | |
| | 10languages(English, French, Italian, German, Spanish, Portuguese, Russian, Korean, Japanese, Simplified Chinese & Traditional Chinese) | | 10languages(English, French, Italian, German, Spanish, Portuguese, Russian, Korean, Japanese, Simplified Chinese & Traditional Chinese) | |
| ● Set-up commands | | | | |
| — Color palettes | Iron, anti-iron, feather red, black hot, white hot, medical | | Iron, anti-iron, feather red, black hot, white hot, medical | |
| — Set-up commands | Date/time, temperature units C/F/K, language, scale | | Date/time, temperature units C/F/K, language, scale | |
| — Measuring Calibration | Automatic, based on inputs | | Automatic, based on inputs | |
| ● Image storage | | | | |
| — Storage type | 2G SD card, Building-in flash | | 2G SD card, Building-in flash | |
| — Storage capacity | Up to 800 images in built-in flash card Up to 6600 images in 2G SD card | | Up to 600 images in built-in flash card Up to 5000 images in 2G SD card | |
| — Storage format | Standard JPEG, including measurement data | | Standard JPEG, including measurement data | |
| — Periodic image storage | user defined, 6 seconds at least | | user defined, 6 seconds at least | |
| ● Laser pointer | | | | |
| — Grade/Type | Class II, 1mW/635nm red | | Class II, 1mW/635nm red | |
| ● Power system | | | | |
| — Battery | Li-ion, ≥ 3 hours operating time | | Li-ion, ≥ 3 hours operating time | |
| — Charging system | In camera or AC adapter | | In camera or AC adapter | |
| — AC supply | 90 ~ 260V AC, 50/60Hz, 5V DC output | | 90 ~ 260V AC, 50/60Hz, 5V DC output | |
| — Voltage | 5V ± 5% DC | | 5V ± 5% DC | |
| — Power management | Automatic shutdown (user selectable) | | Automatic shutdown (user selectable) | |
| ● Environmental data | | | | |
| — Operating temperature range | -20℃ ~ +50℃ | | -20℃ ~ +50℃ | |
| — Storage temperature range | -40℃ ~ +70℃ | | -40℃ ~ +70℃ | |
| — Humidity | ≤ 90% (non-condensation) | | ≤ 90% (non-condensation) | |
| — IP level | IP20 | | IP20 | |
| — Shock | At work: 25G, IEC68-2-29 | | At work: 25G, IEC68-2-29 | |
| — Vibration | At work: 2G, IEC68-2-6 | | At work: 2G, IEC68-2-6 | |
| ● Physical data | | | | |
| — Camera weight, incl. battery and standard lens | 480g | | 480g | |
| — Camera size(LxWxH) | 128 × 62 × 154mm | | 128 × 62 × 154mm | |
| — Size of screw nut on tripod | 1/4" _20 | | 1/4" _20 | |
| ● Data communication interfaces | | | | |
| — USB | Data transfer to and from PC | | Data transfer to and from PC | |
| — Video output | PAL/NTSC | | PAL/NTSC | |
| — Audio output | Yes | | Yes | |
| ● Data communication interfaces | | | | |
| — Standard | Infrared camera with standard lens, 2 Batteries, Battery charger, USB cable, SD card, SD card reading, IRSee software CD-ROM, Power supply, User documentation, Warranty extension card or registration card, Calibration certificate. | | | |
| — Optional Accessories | IR lens, Li-ion battery | | | |

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