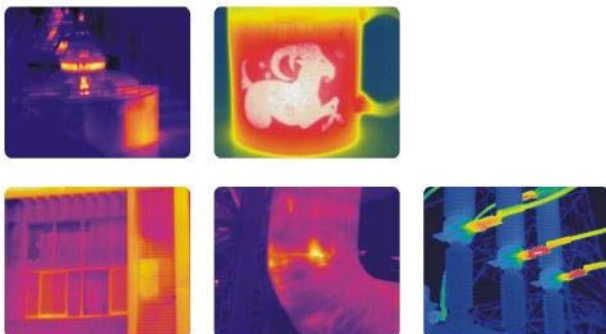


Thermal Imaging Cameras

TI170 / TI175 / TI390 / TI395



Thermal Imaging Cameras

TI170 / TI175 / TI390 / TI395



● TI390 & TI395



● TI170 & TI175

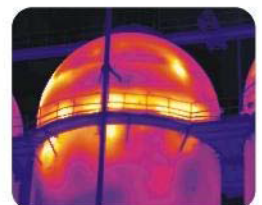
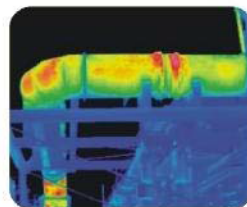
ULIRvision TI170|TI175|TI390|TI395 are the third generation thermal imaging system products. With cutting-edge infrared technology, including high sensitivity IR detector(25 μ m pixel pitch, NETD<50mK) and ergonomic design, they are the ideal choice for professional thermographers to have the most efficient 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 3.0 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

- **Compact volume, light weight, POCKET camera**

With 393g weight and 128x62x154mm size, it is very easy and convenient for user to bring it to make thermograph.

- **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.

- **Bright LED light, Laser pointer**

Helps user to locate objects easily and operate thermal images in poor light ambience.

- **Built-in digital camera**

3.0 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



3.0 MP Digital Camera
LED Lamp Laser Pointer



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	
— Digital Zoom	1-4x Continuous		1-8x Continuous	
— Visual camera	3.0 mega pixel		3.0 mega pixel	
— Spotlight	10cd/m²		10cd/m²	
● 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	Max/Min/Average temp		Max/Min/Average temp	
— Emissivity correction	Variable from 0.01~1.0		Variable from 0.01~1.0	
— Alarm	Voice and Color		Voice and Color	
— Multiple language menu	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				
— Real-time Video	Transfer via USB		Transfer via USB	
— 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℃/°F/K, language, scale		Date/time, temperature units℃/°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	110 ~ 240V AC, 50/60Hz, 5V DC output		110 ~ 240V 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	IP50		IP50	
— Shock	25G, IEC60068-2-29		25G, IEC60068-2-29	
— Vibration	2G, IEC60068-2-6		2G, IEC60068-2-6	
● Physical data				
— Camera weight, incl. battery and standard lens	393g		393g	
— 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	
● Packing includes				
— 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			

