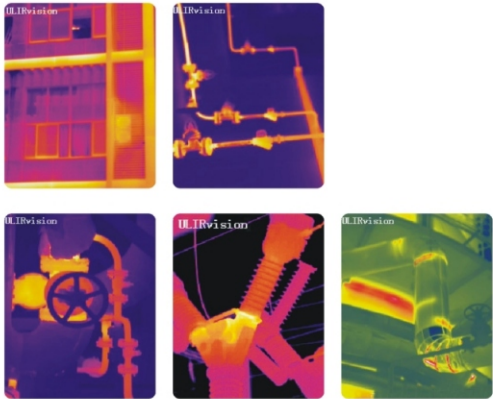


Thermal Imaging Camera **TI160 & TI384**



Thermal Imaging Camera TI160 & TI384



● TI384



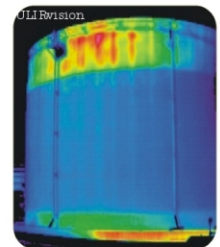
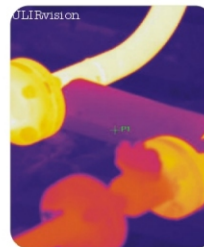
● TI160

Application

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

Infrared radiation can't be seen by the human eye. However, all objects with a temperature above absolute zero, approximately -273°C , emit infrared thermal radiation. Thermal imagers can convert infrared radiation into electrical signals and thus render it visible.

TI160 & TI384 with a high thermal sensitivity of 65mk can identify the smallest temperature difference from the object and display it by excellent thermal images. As a potential fault always coming with the partial overheat / overcool, so the user can locate the overheated / overcooled part with a ULIRvision Thermal Imaging Camera instantaneously, and more details about the fault will be found by assistance of our professional Thermal Imaging Analysis Software.



Features

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

±2% accuracy, 65mK thermal sensitivity.

- **Wide temperature measurement range**

Covering a standard temperature range of -20°C to 350°C, up to 1200°C for optional.

- **Laser pointer**

Helps user to locate target easily when operating.

- **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.

- **Exchangeable IR lenses for more flexibility**

Flexible design allows TI 160 & TI 384 to adapt a wide-angle lens or a telephoto lens. With this replaceable lens design, TI series can present a larger image section and a quick overview with wide-angle lens, and more details image for measurement objects with the telephoto lens.

- **High temperature measurement option**

The temperature measuring range of the TI 160 and TI 384 can be extended to 1200°C, by fitting a high-temperature filter lens onto the original camera lens.

- **Automatic Hot/Cold/Average spot recognition**

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

- **Intuitive and easy operating menu**

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

- **Multifunction PC analysis software IRSee**

Free IRSee analysis software comes with TI160 & TI384. IRSee allows users to analyse thermal images and visible images, and export all information into Microsoft Office Word, and Users can edit reports easily.



Large 3.5" color LCD display



Replaceable lenses for user application choice



Simple changing replacable lens



Free IRSee software for analysis & reporting.

Technical Specifications

Item	TI160	TI384
● Detector Data		
- Detector type	Focal plane array(FPA), uncooled Microbolometer	Focal plane array(FPA), uncooled Microbolometer
- IR resolution	160 x 120 pixels	384 x 288 pixels
- Pixel pitch	25 μ m	25 μ m
● IR Imaging and Optical Data		
- Spectral range	8-14 μ m	8-14 μ m
- Field of view (FOV)/min focus distance	21° x 16° / 0.15m(standard lens) 35° x 27° / 0.05m(wide angle lens,optional) 4° x 3° / 0.8m(telephoto lens,optional)	18° x 14° / 0.15m(standard lens) 30° x 23° / 0.1m(wide angle lens,optional) 9° x 6° / 0.8m(telephoto lens,optional)
● Image Presentation		
- Spatial resolution (IFOV)	2.3mrad(standard lens)	1.0mrad(standard lens)
- Thermal sensitivity(NETD)	<65mk at 30°C	<65mk at 30°C
- Image frequency	50/60Hz	50/60Hz
- Focus	Manual	Manual
- Electronic zoom	2x	2x
- Display	Built-in 3.5" color LCD	Built-in 3.5" color LCD
● Measurement		
- Temperature range	-20°C to +120°C / 0°C to +350°C(switchable) Up to 1200°C(optional)	-20°C to +120°C / 0°C to +350°C(switchable) Up to 1200°C(optional)
- Accuracy	±2°C or ±2% of reading	±2°C or ±2% of reading
- Measurement spot	Up to 4 moveable spots	Up to 4 moveable spots
- Measurement area	Up to 3 moveable boxes, automatically capture maximum/minimum, average temperature	Up to 3 moveable boxes, automatically capture maximum/minimum, average temperature
- Line profile	Vertical, horizontal	Vertical, horizontal
- Isotherms analysis	Detect high/low temperature/interval	Detect high/low temperature/interval
- High temperature alarm	Voice, color	Voice, color
- Emissivity correction	Adjustable from 0.01 to 1.0	Adjustable from 0.01 to 1.0
- Temperature correction	Auto	Auto
- Multiple Language Menu	10 Languages (English, French, Italian, German, Spanish, Portuguese, Russian, Korean, Japanese, Simplified Chinese & Traditional Chinese)	10 Languages (English, French, Italian, German, Spanish, Portuguese, Russian, Korean, Japanese, Simplified Chinese & Traditional Chinese)
● Image Storage		
- Storage type	Built-in flash card, up to 1500 images	Built-in flash card, up to 800 images
- Files format	Standard JPEG, 14-bit measurement data included	Standard JPEG, 14-bit measurement data included
- Voice annotation	40s voice record, stored with per image via built-in microphone.	40s voice record, stored with per image via built-in microphone.
● Laser Indication		
- Classification type	Class 2, 1mW/635nm Red	Class 2, 1mW/635nm Red
● Power System		
- Battery type	Rechargeable and replaceable Li-ion battery	Rechargeable and replaceable Li-ion battery
- Battery operating time	Approx 3 hours	Approx 3 hours
- Power saving	User defined	User defined
- Power operation	12V ±5%	12V ±5%
● Environment Data		
- Operating temperature range	-20°C - +50°C	-20°C - +50°C
- Storage temperature range	-40°C - +70°C	-40°C - +70°C
- Humidity(operating and storage)	≤90%non-condensing	≤90%non-condensing
- Shock	25G IEC68-2-29	25G IEC68-2-29
- Vibration	2G IEC68-2-6	2G IEC68-2-6
● Physical Data		
- Size, L x W x H	330mm × 95mm × 86mm	330mm × 95mm × 86mm
- Weight	650g	650g
- Tripod mounting	1/4 " -20	1/4 " -20
● Interfaces		
- External DC input	Yes	Yes
- Audio output	Yes	Yes
- Video output	PAL / NTSC	PAL / NTSC
- USB	Images transfer to PC	Images transfer to PC
● Camera Includes		
- Standard	Thermal imaging camera with standard IR lens, 2 Li-ion batteries, battery charger, adapter, Video cable, USB cable, Software CD, instruction, warranty card, transport case	Thermal imaging camera with standard IR lens, 2 Li-ion batteries, battery charger, adapter, Video cable, USB cable, Software CD, instruction, warranty card, transport case
- Optional accessories	Li-ion battery, IR lens	Li-ion battery, IR lens

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