

## TC640 Thermal Camera



- 640x480 resolution
- 4.3" LCD colour touchscreen
- -20°C~550°C temperature measurement
- IR, VIS, PIP, MIF temperature details
- 13 MP visible light photo and video recording
- Laser ranging
- Share files via mobile app
- Video streaming, real-time data transmission with PC analysis software

### DESCRIPTION

The Megger TC640 thermal camera comes with a high-sensitivity IR detector with a maximum resolution of 640 x 480, a 13 MP visible light camera, and 5 focusing modes. This high-precision Thermal Camera is designed specifically for industrial-use, helping users to intuitively view high definition images and temperature details of target subjects. A 30 Hz infrared frame rate provides for fast and accurate access to more temperature data of moving targets and further detailed analysis.

### FEATURES

- New generation IR sensor with 640 x 480 resolution
- Algorithms for pixel point details and hidden hazards
- A 13 MP visible light camera and dual spotlight illuminators for easy location of faults
- Up to 30 Hz IR video frame rate for temperature analysis
- IP54 waterproof and dustproof and 2 m drop resistance with military-grade quality
- OTA online upgrades to keep the device up to date
- Built-in Wifi module for easy transfer of images to the cloud and remote instant download and analysis

### APPLICATIONS

- Electrical circuits, distribution boards and cabling
- Commercial or industrial circuits
- Industrial distribution boards
- Motor, generator and rotating machine maintenance
- Powergeneration and substations
- Air conditioning maintenance
- CHP systems
- Commercial Heating systems (central heating, underfloor, heat pumps etc)
- Commercial and industrial solar PV systems
- Full heat loss surveys and building insulation
- IT systems
- Component level heat analysis on PCB's
- Air leaks and moisture issues
- Medical use
- Firefighting & other Rescue services
- Law enforcement
- Veterinary and Wildlife

## TC640 Thermal Camera

### SPECIFICATIONS

#### Imaging and optics

Detector type	VOx, 7.5 – 14 µm
Infrared resolution	640 × 480@12 µm
Super resolution	Upgrade images to to 1280 × 960
NETD	30 mK
Frame rate	30 Hz/9 Hz
Focal length	17.7 mm
Field of view	25 ° × 19 ° / 24 ° × 18 °
IFOV	0.68 mrad / 0.66 mrad
Min. object distance	0.15 m
D:S	1470:1
Focusing mode	Manual / Automatic / Touch autofocus / Continuous autofocus
Digital zoom	1.1x to 20x

#### Measurement and analysis

Measurement range	Support auto-switching: -40°C to 150°C, 0°C to 650°C
Measurement accuracy	±2°C or ±2%, whichever is greater
Analyzed target	16 in total (Spot/Line/Area)
Alarm	Full screen temperature threshold alarm (image, voice and flash)
Other settings	Isothermals, Smart Stroke, Area calculation

#### Image display

Screen size	4.3" LCD, colour touchscreen, 800×480
Image mode	InfraRed, Visible Light, Multi-Image Fusion and Picture-in-Picture
Color palettes	15: White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Tint, Black Hot, Blue Hot, Sepia, Green Hot, Ice and Fire, Amber; Customized

Image adjustment	Level span mode: Automatic, Semi-automatic, Manual
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Digital camera	13 MP
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#### Functions

Laser	Laser (indication, ranging 0.1 m to 40 m)
Recording function	Photo (image stitching) and Video (infrared & visible light)
Cloud services	Available
Other	2 Customized buttons, OTA update

#### Storage and transmission

Storage media	Built-in (64 GB) and external SD card (up to 256 GB)
Image file type	JPG with temp info
Video file type	MP4 format (without temp info) can be used to record audio synchronously; Irgd (with temp info), up to 30 Hz (optional) for temperature analysis
External interface	USB-C, SD card slot, Tripod socket
Wifi	Wifi connection to the mobile terminal for image and real-time video transmission

#### Power system

Battery type	Interchangeable rechargeable lithium-ion battery (2 pcs)
Operating time	4 hours

#### Environmental parameters

Working temperature	-20°C to 50°C
IP rating	IP54
Drop	2 m drop test

#### Physical parameters

Hardware	Spotlight x 2, Microphone, Speaker, Electronic compass, GPS
Weight	1.2 kg (with battery)
Size	292 × 125 × 125 mm
Software kit	PC: ThermoLink app iOS/android: Thermography app

#### Box contents

TC640 Thermal camera (with lens),  
Lens front and back cover, Lithium-ion  
battery (2 pcs), Soft protective case  
that fits inside hard transport case,  
Desktop charger, Power adapter,  
Adapter plug,  
USB-C to USB-C Cable, USB-A to  
USB-C Cable, RJ45 Ethernet Patch  
Cable, USB-C to Ethernet Adapter,  
SD card (64 GB), Wrist strap,  
Shoulder strap, Quick Start Guide,  
Calibration certificate

Optional accessories	Lithium-ion battery pack
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# TC640

## Thermal Camera

### ORDERING INFORMATION

Description	Part number
TC640 Thermal Camera	1016-974
<b>Included Accessories</b>	
Wrist Strap	
Camera neck/shoulder Strap	
Desktop Battery charger with adapter plugs x 3 (UK, EU and AU/NZ/CN)	
Lithium-ion battery (2 pcs)	
Hard transport case	
Soft protective case with shoulder strap (fits inside hard transport case)	
Lens front and back cover	
USB-C power adapter	
USB-C to USB-C Cable	
USB-A to USB-C Cable	
RJ45 Ethernet Patch Cable	
USB-C to Ethernet Adapter	
SD card (64 GB)	
Quick Start Guide	
Calibration certificate	

#### SALES OFFICE

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#### TC640\_DS\_EN\_V01

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