QUICK START GUIDE AND SAFETY WARNINGS

Megger

TC256P

Pocket Thermal Camera

User Guide →

Register → megger.com/register

Support → megger.com/support

EN
ENGLISH

1. Safety warnings

These safety warnings must be read and understood before the instrument is used. Retain for future reference. THE EQUIPMENT MUST BE USED ONLY BY SUITABLY TRAINED AND COMPETENT PERSONS.

National Health and Safety Legislation requires users of this equipment or their employers to carry out valid risk assessment of all work so as to identify potential sources of danger and to mitigate risk.

If this equipment is modified or used in a manner other than specified by the manufacturer, the protection provided by the equipment may be impaired.

No user serviceable parts are inside the equipment. Refer repairs to Megger approved service centres.

- Do not look into the laser beam or point beam to eyes.
- This equipment is not intrinsically safe and must not be used in explosive atmospheres.
- This equipment is for indoor and outdoor use up to 2000 m altitude. It must not be used in wet conditions or outside the specified temperature range.
- If the equipment gets wet, disconnect and do not use. Clean equipment with a dry, clean cloth.
- Inspect the equipment for damage before each use. The equipment must not be used if any part of it is damaged.
- Avoid direct exposure of the device to high-intensity thermal radiation emitters, such as the sun, lasers and spot welders.
- Store the packaged product in a well-ventilated and clean environment with temperatures ranging from -40°C to 70°C and relative humidity not exceeding 95%. Ensure the area is free of condensate and corrosive gas.
- Protect the product from rain and water during transportation. Place it flat and protect it from violent vibration and impact. Handle with care.
- Avoid knocking, throwing or vibrating the device or its accessories to prevent damage.
- Liquid Exposure: Do not spill liquids on the device or cables, as this can cause damage.
- This equipment contains a lithium-ion battery. Do not heat or dispose of the product in a fire.
- At the end of the equipment's life dispose of it according to local regulations for recycling. Do not dispose of this equipment to landfill.
- Charge the battery as specified in the user guide, following the proper steps and precautions. Improper charging may heat or damage the battery, or even cause injuries.
- Never attempt to open or disassemble the battery. If the battery leaks and the liquid enters your eyes, flush your eyes with water immediately and seek medical attention.

2. Warranty

New instruments are covered by a two year warranty from the date of purchase by the User, the second year being conditional on the free registration of the product on **www.megger.com/register**. You will need to register and then login to complete the

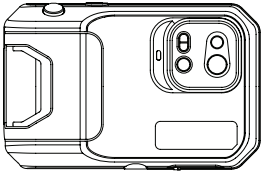
registration of your product. The second year warranty covers faults, but not recalibration of the instrument which is only warranted for one year. Any unauthorised prior repair or adjustment will automatically invalidate the warranty.

The battery is covered by a one year warranty from the date of purchase by the User.

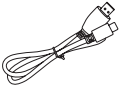
2.1 Safety symbols marked on the instrument

	Refer to user instructions		Equipment complies with current EU directives.
	Equipment protected throughout by Double Insulation		Indoor use only
	Warning: laser beam		Do not dispose of in landfill, sewage systems or by fire.
	This equipment contains a radio device meeting FCC requirements		Class 2 Laser Product. Do not look into the laser beam or point beam to eyes.

3. Package contents



Thermal camera



USB Cable

US standard adapter plug

EU standard adapter plug

Manual

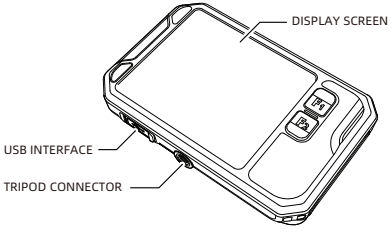
UK standard adapter plug

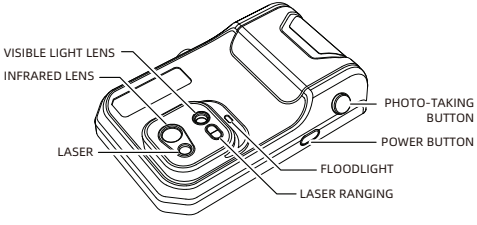
Australian standard adapter plug

Wrist Strap

Flexible package

4. Instrument overview





5. Basic Operation

5.1 Photo and album

5.1.1 Photo

Press the **Shutter** button in the real-time preview interface, **Photo saved** appears and a thumbnail is displayed in the top right corner.

5.1.2 Photo view

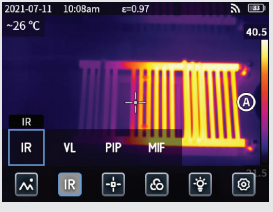
1. Click the thumbnail in the top right corner for a quick view of the photo.
2. Click ••• to open the hidden status bar, and then click to enter the album to view the photos in local album.

5.1.3 Photo operation

1. **Selecting photos:** Enter the album and click **Select** to open the selection menu, and then click to select all /deselect all the photos. Click to upload the selected photos to the cloud service and click to delete the photos.
2. **Photo zoom:** Enter the album and zoom the photo by double clicking the date of the photo or with two fingers.
3. **Photo details:** Enter the album and click a photo to enter the details, and then click in the top right corner to view the shooting time, date and emissivity of the photo; click to view the visible photos; click for intelligent calibration and manual calibration; click to delete the photo.

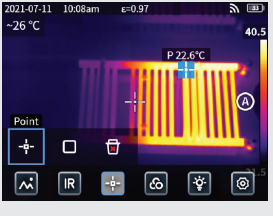
5.2 Mode switch

Click ••• to open the hidden status bar and then click to open the mode options:
select **IR**, the photo mode switches to infrared;
select **VL**, the photo mode switches to visible light;
select **PIP**, the photo mode switches to PIP;
select **MIF**, the photo mode switches to multispectral image fusion.



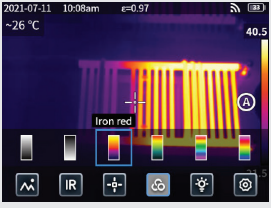
5.3 Object analysis

Click ••• to open the hidden status bar, and then click to add a point analysis object and click to add a rectangular analysis object. Long press the rectangular analysis object to set the maximum temperature, the minimum temperature, the average temperature, the area and the center of the object and to delete the object.



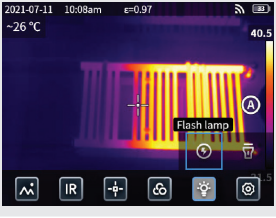
5.4 Pseudo color

Click ••• to open the hidden status bar and then click to open the pseudo colour menu to switch different pseudo colours.



5.5 Light

Click ••• to open the hidden status bar and then click to select the flashlight or floodlight separately or simultaneously.



5.6 Settings

Click ••• to open the hidden status bar and then click to enter the settings menu.

5.7 F1/F2 accessibility buttons

1. Enter the settings menu and select F1/F2 to set the commonly used functions.
2. If F1/F2 is set as laser ranging, turn on the **Laser ranging** in the settings menu and back to the real-time preview interface and click F1/F2, the device will emit a red laser dot and display the distance measured in the center of the screen.
3. If F1/F2 is set as intelligent calibration, turn on the **Save and calibrate intelligently** in the settings menu and back to the real-time preview interface and press the shooting button to freeze the photo, then click for intelligent calibration and click for manual calibration.

5.8 Thermo Tools App

Download the Thermo Tools app to your PC using the link below. Connect the computer and the thermal camera with a USB cable, and import the data from the thermal camera for secondary analysis within the Thermo Tools app.

Thermo Tools app	megger.link/TC256P-app

5.9 Cloud service

Using the online cloud storage, you can upload your photos using the local wifi connection at any time. You can then download the images later or colleagues can download the photos to analyze the problem while you are on location.

Steps:

1. Enter the settings menu and select **Cloud service.** Connect to wifi, and register an account for the first time (mobile phone number or e-mail).
2. Login in to the cloud server.
3. Enter the album and select **Cloud album**, then synchronize local photos.
4. You can open the infrared analysis software and login in your cloud account in a PC to download the photos for analysis.

6. Common problems

Emissivity of common objects

Material	Material Emissivity	Material	Material Emissivity
Wood	0.85	Rust	0.8
Black paper	0.86	Copper plate	0.06
Water	0.96	Gypsum	0.75
Polycarbonate	0.8	Dark aluminum	0.95
Brick	0.75	Paint	0.9
Concrete	0.97	Human skin	0.98
Stainless steel	0.14	Rubber	0.95
Copper oxide	0.78	Asphalt	0.96
Adhesive tape	0.96	Soil	0.93
Cast iron	0.81	PVC material	0.93
Aluminum plate	0.09		

6.1 Analysis of common problems

Symptom	Cause	Measure
Boot failure	Low battery	Reuse battery after charging
Plug of external power source is not inserted properly	Pull the plug and reinsert it in proper place	
Battery life expires	Replace with new battery	
IR image is not clear	Lens have misted up or been polluted	Clean lens with specialized equipment
Visible light image is not clear	Surrounding environment is too dark	Provide lighting
There is vapor in front of visible light or the visible light is polluted	Clean the front-end of visible light with specialized equipment	
Temperature measurement is inaccurate	Set the relevant parameters for temperature measurement incorrectly.	Change parameter setting or restore the default parameters.
Temperature measurement starts immediately after start-up	To ensure temperature measurement accuracy, we recommend you to start temperature measurement 5-10 minutes after start-up	
Long time no calibration	To ensure accurate temperature measurement result, we recommend you to send back the thermal imager for calibration once a year.	

This instrument is manufactured in China.

The company reserves the right to change the specification or design without prior notice.

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