MiLESEEY TR256i

MiLESEEY TR256i Thermal Camera User Manual

Model: TR256i | Brand: MiLESEEY

Introduction

The MiLESEEY TR256i is a compact, high-resolution thermal imaging camera designed for use with Android smartphones and tablets. It features a 256 x 192 IR thermal sensor, providing clear and detailed thermal images for various applications. With high measurement accuracy and a wide temperature range, it is suitable for industrial inspections, building diagnostics, home maintenance, and more.

This manual provides essential information for setting up, operating, and maintaining your TR256i thermal camera.



Image: The MiLESEEY TR256i thermal camera, a compact device with a USB-C connector, shown alongside a smartphone displaying its thermal imaging interface. A carrying case and USB cable are also visible.

What's in the Box

Upon opening the package, verify that all the following items are included:

- MiLESEEY TR256i Thermal Camera
- USB Extension Cable (19.7 inches)
- Protective Carrying Case
- User Manual (this document)



Image: The packaged contents of the TR256i, including the thermal camera, USB cable, carrying case, and documentation.

Setup

1. Compatibility

The TR256i thermal camera is compatible with any device running Android 7.0 or higher. Ensure your smartphone or tablet meets this requirement for optimal performance.

2. App Installation

Before connecting the camera, download and install the "Mileseey Thermal" application from the Google Play Store. This app is essential for operating the device and accessing its features.

3. Connecting the Camera

1. Ensure the "Mileseey Thermal" app is installed on your Android device.
2. Plug the TR256i thermal camera directly into your smartphone's or tablet's USB-C port.
3. The Mileseey Thermal app should automatically launch or prompt you to open it. If not, manually open the app.
4. For extended reach or use with laptops, utilize the provided 19.7-inch USB extension cable.



Image: The TR256i thermal camera shown connected to both a smartphone and a laptop, illustrating its compatibility and the use of the extension cable.

Your browser does not support the video tag.

Video: A tutorial demonstrating how to quickly start using the MiLESEEY TR256i thermal camera, including plugging it into a phone and the automatic app launch.

Operating Instructions

1. Interface Overview

Once connected, the Mileseey Thermal app displays the thermal image. The interface includes various controls for settings, photo/video capture, temperature measurement tools, and color palettes.

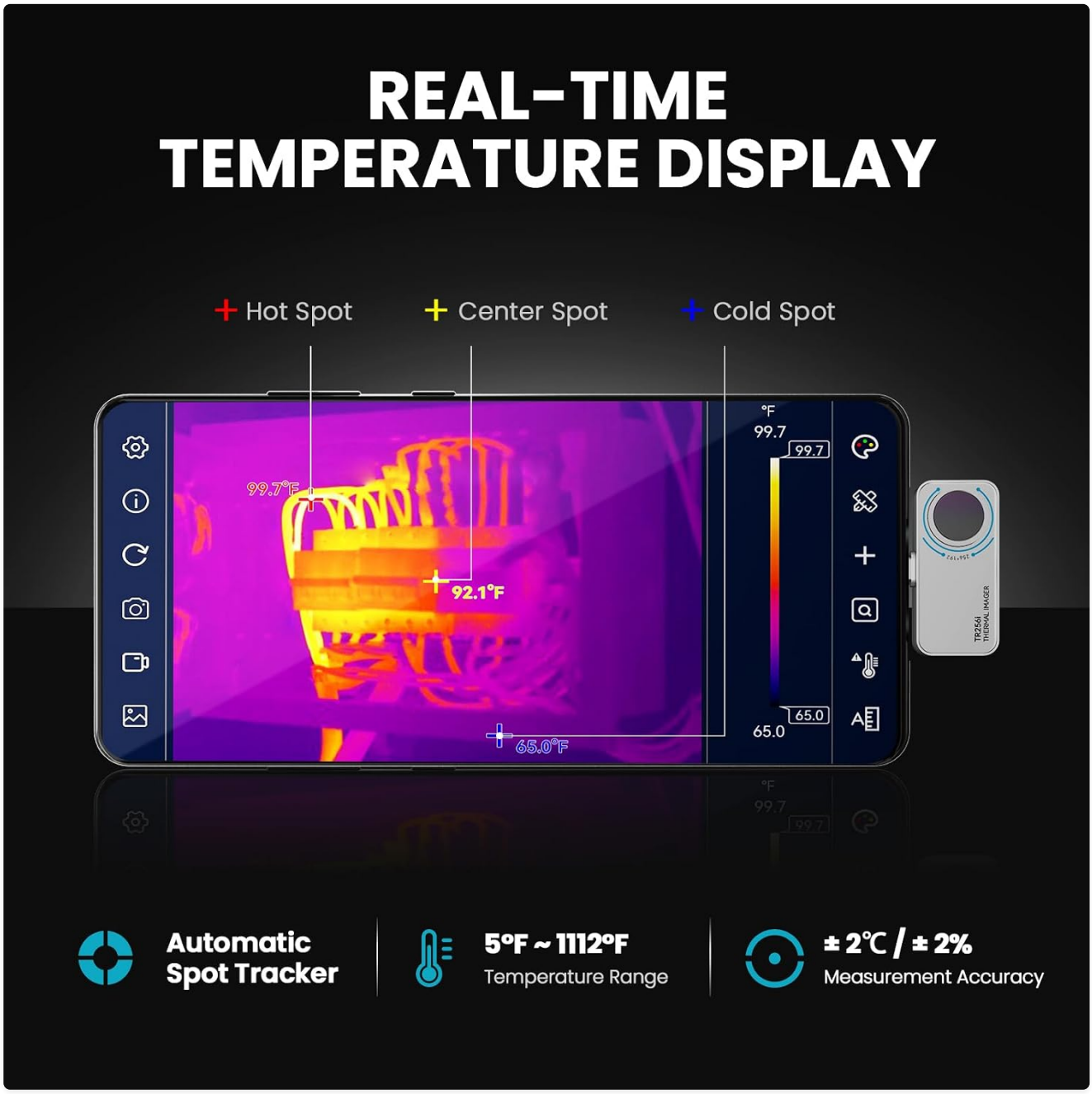


Image: A smartphone displaying the real-time temperature display of the TR256i, showing hot, center, and cold spots with temperature values.

2. Temperature Measurement Features

- **Spot Measurement:** Tap on the screen to add individual temperature measurement points.
- **Line Measurement:** Draw a line to display the maximum and minimum temperatures along that line.
- **Area Measurement:** Draw a rectangular box to display the maximum and minimum temperatures within the selected area.
- **Temperature Tracking:** The camera automatically locks onto the highest, lowest, and center temperatures in the view.
- **High Temperature Alarm:** Set a threshold for high temperature alerts.

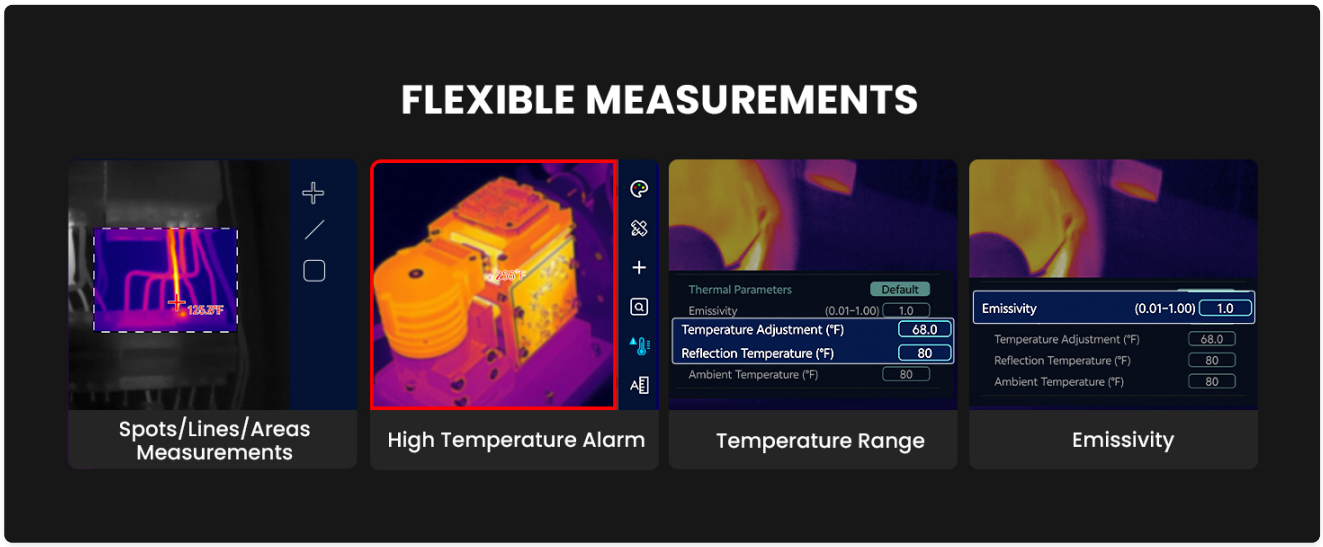


Image: The app interface highlighting flexible measurement options including spots, lines, areas, high temperature alarm settings, temperature range, and emissivity.

3. Color Palettes

The app offers various color palettes to visualize thermal data. You can switch between different palettes (e.g., Iron Red, Rainbow, Black Hot, White Hot) to best suit your application and preference. The temperature scale can be adjusted by dragging the palette bar up and down.



Image: The app interface demonstrating customizable image effects, including spots/lines/areas measurements, adjustable temperature range, high temperature alarm, and 7 color palettes.

4. Image Quality

The TR256i features a 256x192 IR resolution and a 25 Hz refresh rate, providing clear and smooth thermal images. This high resolution allows for detailed analysis of temperature variations.



Image: A comparison of thermal images at different resolutions (80x60, 160x120, 256x192), highlighting the exceptional clarity of the 256x192 resolution provided by the TR256i.

5. Photo and Video Output

You can capture still images and record videos of the thermal view directly from the app. These files are saved to your device's gallery for later review and analysis.

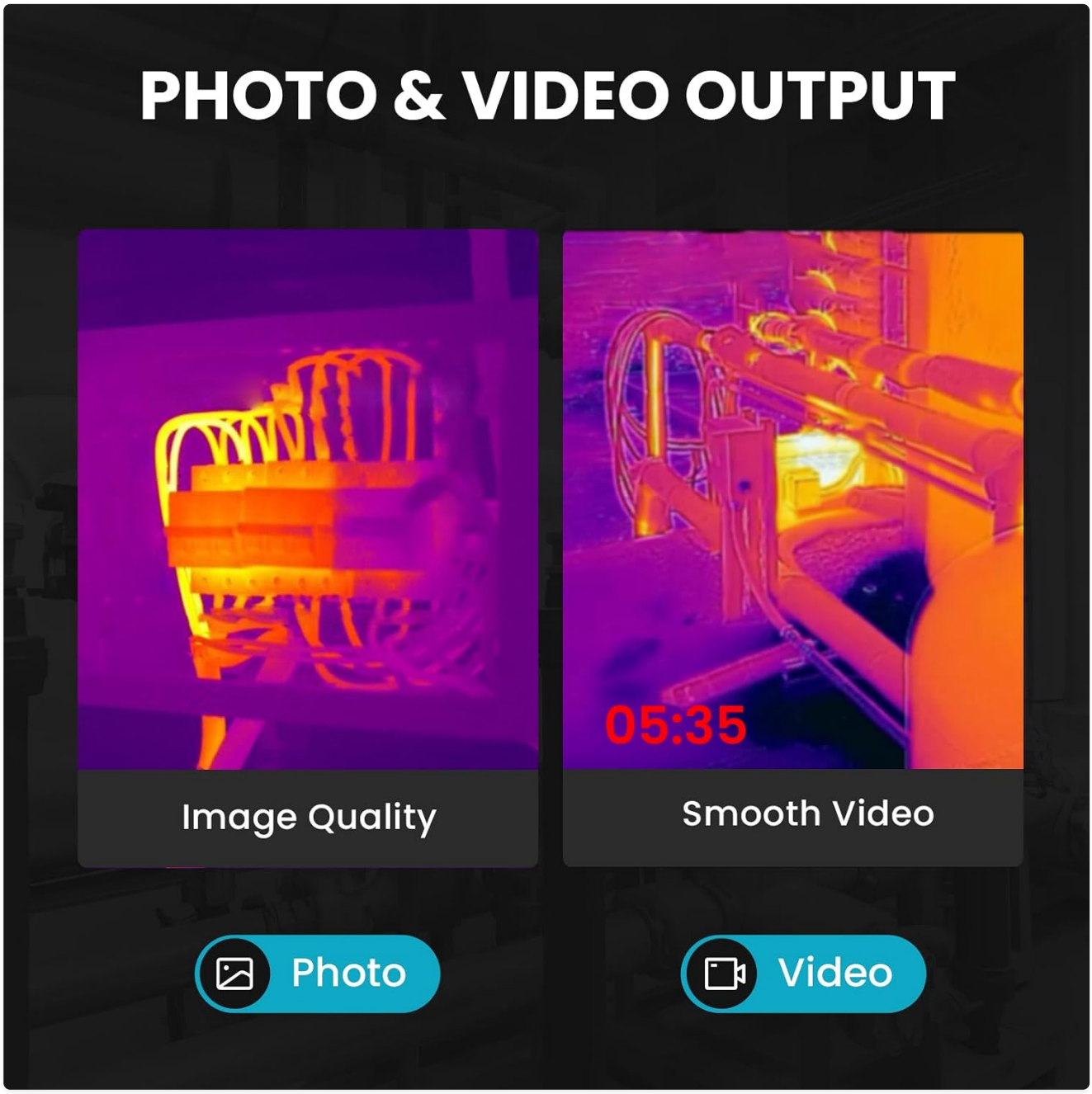


Image: A visual comparison showing the image quality and smooth video output capabilities of the TR256i thermal camera.

Applications

The MiLESEEY TR256i thermal camera is a versatile tool suitable for a wide range of applications, including but not limited to:

- **Industrial Maintenance:** Identifying overheating components in machinery, electrical panels, and industrial equipment.
- **Building Diagnostics:** Detecting insulation deficiencies, air leaks, moisture intrusion, and HVAC system issues in residential and commercial buildings.
- **Electrical Inspections:** Locating hot spots in circuits, loose connections, and overloaded breakers.
- **Automotive Inspections:** Diagnosing engine overheating, brake issues, and HVAC system performance in vehicles.
- **Home Safety Checks:** Identifying potential fire hazards, checking appliance temperatures, and ensuring efficient energy use.



Image: Examples of wide applications for the TR256i, including industrial maintenance, auto inspections, electrical inspections, water leakage inspections, and home inspection.

Maintenance

- Keep the camera lens clean. Use a soft, lint-free cloth to gently wipe the lens if necessary. Avoid abrasive materials or harsh chemicals.
- Store the camera in its protective carrying case when not in use to prevent damage from dust, dirt, and impacts.
- Avoid exposing the camera to extreme temperatures or direct sunlight for prolonged periods.
- Ensure the USB-C connector is free from debris before plugging it into your device.

Troubleshooting

Camera Not Detected / App Not Launching

- Ensure your Android device is running version 7.0 or higher.

- Verify that the "Mileseey Thermal" app is correctly installed.
- Check the USB-C connection. Ensure the camera is fully inserted into the port.
- Try restarting your Android device.
- If using the extension cable, ensure it is securely connected at both ends.
- Check your phone's USB connection settings. Some Android devices require enabling "OTG" or "USB debugging" in developer options for external devices.

Inaccurate Temperature Readings

- Ensure the camera lens is clean and free from obstructions.
- Verify the emissivity setting in the app. Different materials have different emissivities, which can affect temperature accuracy. Adjust this setting based on the surface you are measuring.
- Ensure the ambient temperature and reflection temperature settings are correctly configured in the app's thermal parameters.

Laggy or Choppy Video

- Ensure your Android device has sufficient processing power and available RAM.
- Close other background applications that might be consuming resources.
- While the camera has a 25Hz refresh rate, rapid movement during scanning can cause perceived lag. Move the camera slowly and steadily for best results.

Specifications

IR Resolution	256 x 192
Thermal Sensitivity (NETD)	<50 mK
Refresh Rate	25 Hz
Temperature Range	5°F ~ 1112°F (-15°C ~ 600°C)
Measurement Accuracy	±2°C or ±2%
Dimensions	1.3 x 2.2 x 0.4 inches (34.4 x 56.6 x 12.1 mm)
Weight	Approximately 20 grams (0.7 ounces)
Lens	56° x 42° Wide-Angle Lens
Compatibility	Android 7.0 or higher

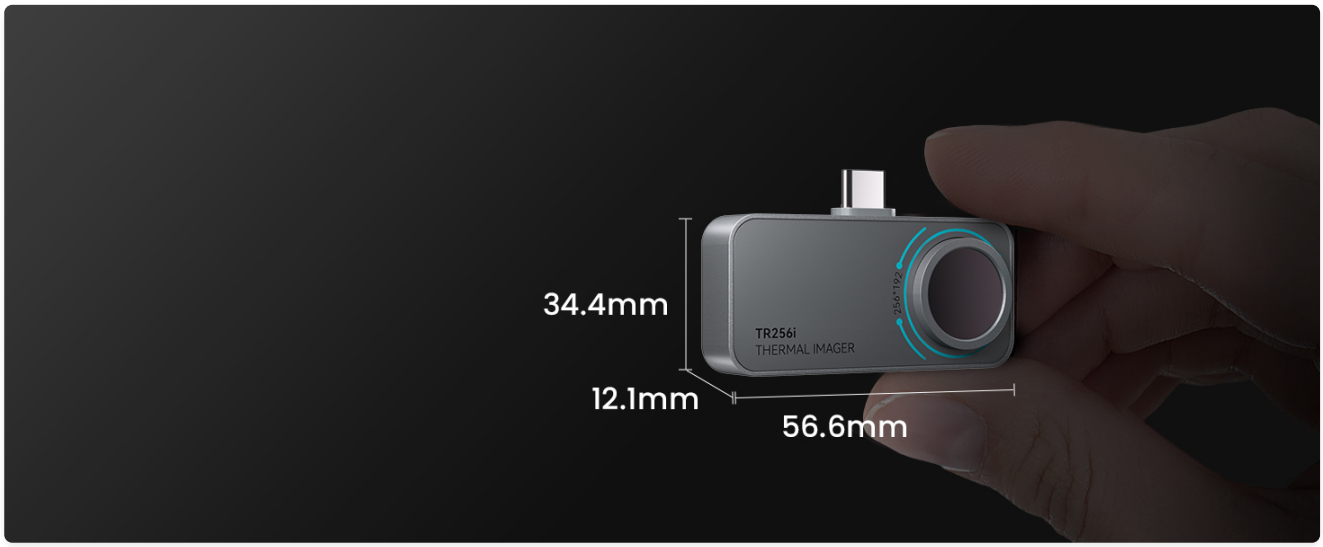


Image: A diagram illustrating the compact dimensions of the TR256i thermal camera, highlighting its small size.

Warranty and Support

For warranty information, technical support, or any inquiries regarding your MiLESEEY TR256i thermal camera, please contact MiLESEEY customer service.

- **Website:** www.mileseeytools.com
- **Email:** service@mileseey.com

Please have your product model (TR256i) and purchase details ready when contacting support.

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