

Fluke TC01A 25HZ

Fluke TC01A 25Hz iSee Mobile Thermal Camera for Android Smartphones User Manual

Model: TC01A 25HZ

1. INTRODUCTION

The Fluke TC01A 25Hz iSee Mobile Thermal Camera is a compact, high-performance thermal imaging device designed for use with Android smartphones. It provides detailed thermal imagery and temperature analysis capabilities, suitable for a wide range of applications including electrical inspections, HVAC diagnostics, and building maintenance. This manual provides essential information for the safe and effective operation of your device.

2. SAFETY INFORMATION

Please read and understand all safety instructions before using the Fluke TC01A. Failure to follow these instructions may result in injury or damage to the device.

- Do not expose the device to extreme temperatures, moisture, or corrosive environments.
- Avoid direct exposure of the thermal lens to strong light sources, such as the sun or lasers, as this may damage the sensor.
- Use only with compatible Android smartphones.
- Keep the device clean and free from dust and debris.
- Do not attempt to disassemble or modify the device. Refer all servicing to qualified personnel.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Fluke TC01A 25Hz iSee Mobile Thermal Camera for Android

4. PRODUCT OVERVIEW

The Fluke TC01A is a compact unit designed to plug directly into your Android smartphone's USB-C port. It features a thermal lens on one end and a USB-C connector on the other.



Image 4.1: Front view of the Fluke TC01A iSee Mobile Thermal Camera, showing the thermal lens and Fluke branding.



Image 4.2: The compact Fluke TC01A iSee Mobile Thermal Camera held between two fingers, illustrating its small size.

5. SETUP

5.1 App Installation

1. Ensure your Android smartphone is running a compatible operating system version.
2. Download the official Fluke iSee app from the Google Play Store. Search for "Fluke iSee".
3. Install the application on your smartphone.

5.2 Connecting the Camera

1. Locate the USB-C port on your Android smartphone.
2. Carefully plug the Fluke TC01A thermal camera into the USB-C port. Ensure it is fully seated.
3. The Fluke iSee app should automatically launch or prompt you to open it. If not, manually open the app.





Image 5.1: The Fluke TC01A thermal camera connected to the bottom of an Android smartphone, viewed from the back.

6. OPERATING INSTRUCTIONS

6.1 Basic Thermal Imaging

Once the camera is connected and the app is open, the thermal image will appear on your smartphone screen. The app provides a real-time view of temperature differences.



Image 6.1: A hand holding an Android smartphone with the Fluke TC01A attached, displaying a thermal image on the screen.

6.2 Temperature Analysis

The Fluke iSee app offers various tools for detailed temperature analysis:

- **Spot Measurement:** Tap on the screen to get the temperature at a specific point.
- **Line Measurement:** Draw a line to analyze temperature distribution along that path.

- **Area Measurement:** Define an area to view average, maximum, and minimum temperatures within it.

6.3 Image and Video Capture

Use the on-screen controls within the app to capture thermal images or record thermal videos. Captured media will be saved directly to your smartphone's gallery.



Image 6.2: A user holding an Android smartphone with the Fluke TC01A attached, focusing on a subject to capture a thermal image.

6.4 Sharing

The app allows for real-time sharing of thermal images and data, facilitating communication and collaboration.



Image 6.3: A user inspecting an HVAC unit with the Fluke TC01A thermal camera connected to an Android smartphone, displaying a thermal image of the unit.

7. MAINTENANCE

7.1 Cleaning

To clean the thermal camera, gently wipe the lens and body with a soft, lint-free cloth. Do not use abrasive cleaners or solvents. Ensure the device is disconnected from the smartphone before cleaning.

7.2 Storage

Store the Fluke TC01A in a cool, dry place away from direct sunlight and extreme temperatures when not in use. Keep it in its protective packaging or a suitable case to prevent damage.

8. TROUBLESHOOTING

- **Camera not detected:**

- Ensure the camera is fully plugged into the USB-C port.
- Restart the Fluke iSee app or your smartphone.
- Check if your smartphone's USB-C port is functioning correctly with other devices.
- Verify that your smartphone is compatible with the Fluke TC01A.

- **App crashes or freezes:**

- Close and reopen the app.
- Clear the app's cache and data in your phone settings.
- Ensure the app is updated to the latest version.

- Check for available smartphone operating system updates.
- **Inaccurate temperature readings:**
 - Ensure the lens is clean and free from obstructions.
 - Calibrate the camera within the app settings if a calibration option is available.
 - Be aware that reflective surfaces can affect thermal readings.

9. SPECIFICATIONS

Feature	Specification
Product Dimensions	2.36 x 1.32 x 0.44 inches
Item Weight	0.776 ounces
Item Model Number	FLUKE-TC01A 25HZ
Photo Sensor Technology	MICROBOLOMETER
Video Capture Resolution	256*192
Maximum Focal Length	3.2 Millimeters
Maximum Aperture	1022 f (likely refers to 1022°F max temperature)
Flash Memory Type	Android (refers to compatibility)
Connectivity Technology	USB (USB-C)
Minimum Focal Length	28 (units not specified, likely mm or degrees)

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Fluke website or contact Fluke customer service. Keep your purchase receipt as proof of purchase for warranty claims.
Official Fluke Website: www.fluke.com