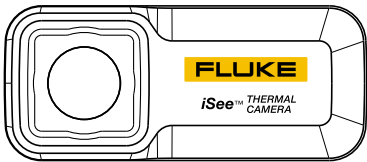


Fluke TC01A

Thermal Camera for Smartphone Users Manual



Warning

- Carefully read all instructions.
- Read all safety information before you use the Product.
- Do not alter the Product and use only as specified, or the protection supplied by the Product can be compromised.
- Do not use the Product if it operates incorrectly.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.
- See emissivity information for actual temperatures. Reflective objects result in lower than actual temperature measurements. These objects pose a burn hazard.
- Avoid external force subjected to the connector.
- The product cannot be used for any medical measurement.
- To avoid damage to the infrared sensor, do not aim the product to the sun or other objects whose temperature is higher than the measuring range.
- Do not forcibly plug or trying to disassemble the product.
- Do not use any ammonia or detergent containing ammonia to clean the lens. This may cause permanent damage to the lens.

Contact Fluke

Fluke Corporation operates worldwide. For local contact information, go to our website: www.fluke.com.

Symbols

Symbol	Description
	WARNING. RISK OF DANGER.
	Consult user documentation.
	Conforms to European Union directives.
	This Product has electronic printed circuit boards. Dispose of the Product in a professional and environmentally appropriate manner. Delete personal data on the Product before disposal. Remove batteries that are not integrated into the electrical system before disposal and dispose of batteries separately. If this Product has an integral battery, put the entire Product in the electrical waste. See Contact Fluke for more information.

Main Features

- Taking IR pictures and edit, sharing
- Taking IR video and sharing
- Non contact temperature measurement up to 550 °C
- Field monitoring
- Customized palette
- Palette definition importing and exporting
- Dot, line, and zone temperature analyzing
- Alarm for the area over preset temperature range

Product Diagram

Table 1. Product Diagram

Item	Description
1	Type C connector
2	IR window

Note: This product does not include Android devices.

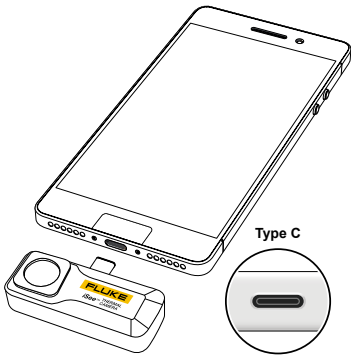
Operating Instruction

- The product requires a smart terminal such as a cell phone. Download and install Fluke iSee App on your smart equipment. Refer to following contents for where you can download the software.
- The Fluke iSee App supports Android 6.0/HarmonyOS 2.0 and above versions. Enable the OTG feature of your smart terminal.

- The product does not contain a battery. The product is powered by the smart terminal.
- To prevent damage to the USB port be gentle when you plug and unplug the product.
- For more accurate measurements, do a manual NUC before you take an IR picture.

Procedures:

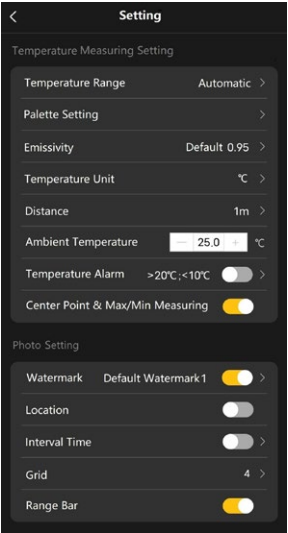
- Plug in the product via Type C USB port.



- Run the App (When product is plugged in, the App will auto pop-up if it is already installed on your smart equipment.)



- To make an accurate measurement, you must properly set the parameters. For example EMS, distance, ambient temperature, and others. See below and refer to the help file in the APP.



Cleaning the Lens

Always keep the lens clean. A clean lens is important to good pictures and accurate measurements. To clean the lens:

- Lightly blow off loose particles with "canned" air or a small squeeze bellows.
- Gently brush off any remaining particles with a soft camel hair brush or a soft lens tissue.
- Clean remaining dirt using a cotton swab or soft lens tissue dampened in distilled water. Do not scratch the surface.
- For fingerprints or other grease, apply Ethanol or denatured alcohol to the lens. First, Apply one of the above to the lens. Wipe gently with a soft, clean cloth until you see colors on the surface, then allow to air dry.
- If silicones (used in hand creams) get on the window, gently wipe the surface with Hexane. Allow to air dry.

Specifications

General Specifications

Function	TC01A
USB Port	Type C
Operating Temperature	0°C ~ 40 °C
Storage Temperature	-30 °C ~ 60 °C
Operating Humidity	10% ~ 90% RH, Non condensing

Function	TC01A
Power Consumption	350 mW (Typical)
Ingress Protection (IP) Rating	IEC 60529: IP54 (Type-C covered)
Operating Altitude	2000 m
Storage Altitude	12000 m
Size (LxWxH)	59x32x10 mm
Weight	22 g
EMC	IEC 61326-1: Portable Electromagnetic Environment CISPR 11: Group 1, Class A <i>Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.</i> <i>Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a lowvoltage power supply network that supplies buildings used for domestic purposes.</i> <i>There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.</i> <i>Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.</i>

Optical performance

Function	TC01A
Image Resolution	256 x 192
Pixel Size	12 μm
Measuring Range	-10 °C ~ 150 °C, 100 °C ~ 550 °C
Accuracy	± 2% of reading / ±2 °C , whichever is greater (at 25 ±5 °C ambient)
Distance	0.25 m ~ 5 m ^[1]
Frame Rate	25 Hz
Warm Up	1 minute
Focus	fixed 3.2 mm
Nonuniformity correction (NUC)	auto
NETD	50 mK
Spectral Range	8~14 μm
Field of View (H x V)	56° x 42°
Spatial Resolution (IFOV)	3.81mrad

^[1] -10 °C ~ 10 °C applicable only for 0.25 m ~ 3 m.

App on Android

Use the Fluke iSee app, to help set up the product, take pictures/video, and other features. Scan below QR code to download the app.



English

LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for 2 years from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke's behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY. Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

Fluke Corporation
P.O. Box 9090
Everett, WA 98206-9090
U.S.A.

Fluke Europe B.V.
P.O. Box 1186
5602 BD Eindhoven
The Netherlands