TOPDON®

TCView

TC001 Plus

See More Than the Human Eye

Thermal Imager

Contents

TC001 Plus

Experience exceptional visuals with TC001 Plus, a dual-lens thermal imager designed to unveil hidden details, so image contours of objects such as circuits and pipes can be easily recognized. Sporting an impressive 256 x 192 IR resolution and an additional 100W visible light lens, paired with the cutting-edge image fusion technology, TC001 Plus captures targets in original colors for overall precision. Compact and portable, it is ideal for home inspectors, HVAC technicians, electricians, automotive technicians, and even farmers looking to protect crops and livestock.
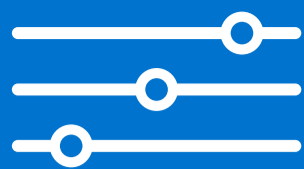
Specs

Specification

Lens:
100W Visible Light
& IR Lenses
IR Resolution:
256 x 192
NETD: <40mK
Frame Rate: 25Hz

TCView

Operating Systems
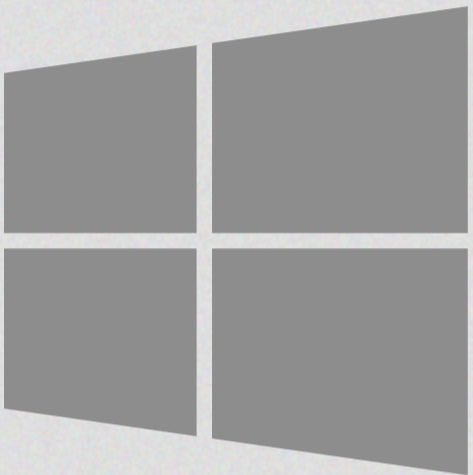
Compatible with Android Phone /
Tablet & Windows Laptop

Temperature

Object Temperature Range:
-20 to 150°C (-4°F to 302°F), 1
50°C to 550°C (302°F to 1022°F)
Accuracy: ±2°C or ±2% of reading
Temperature Resolution: 0.1°C (0.1°F)

Parameters

Weight: 30g
Dimensions: 140*102*46mm
(2.8*1.65*0.55 inch)
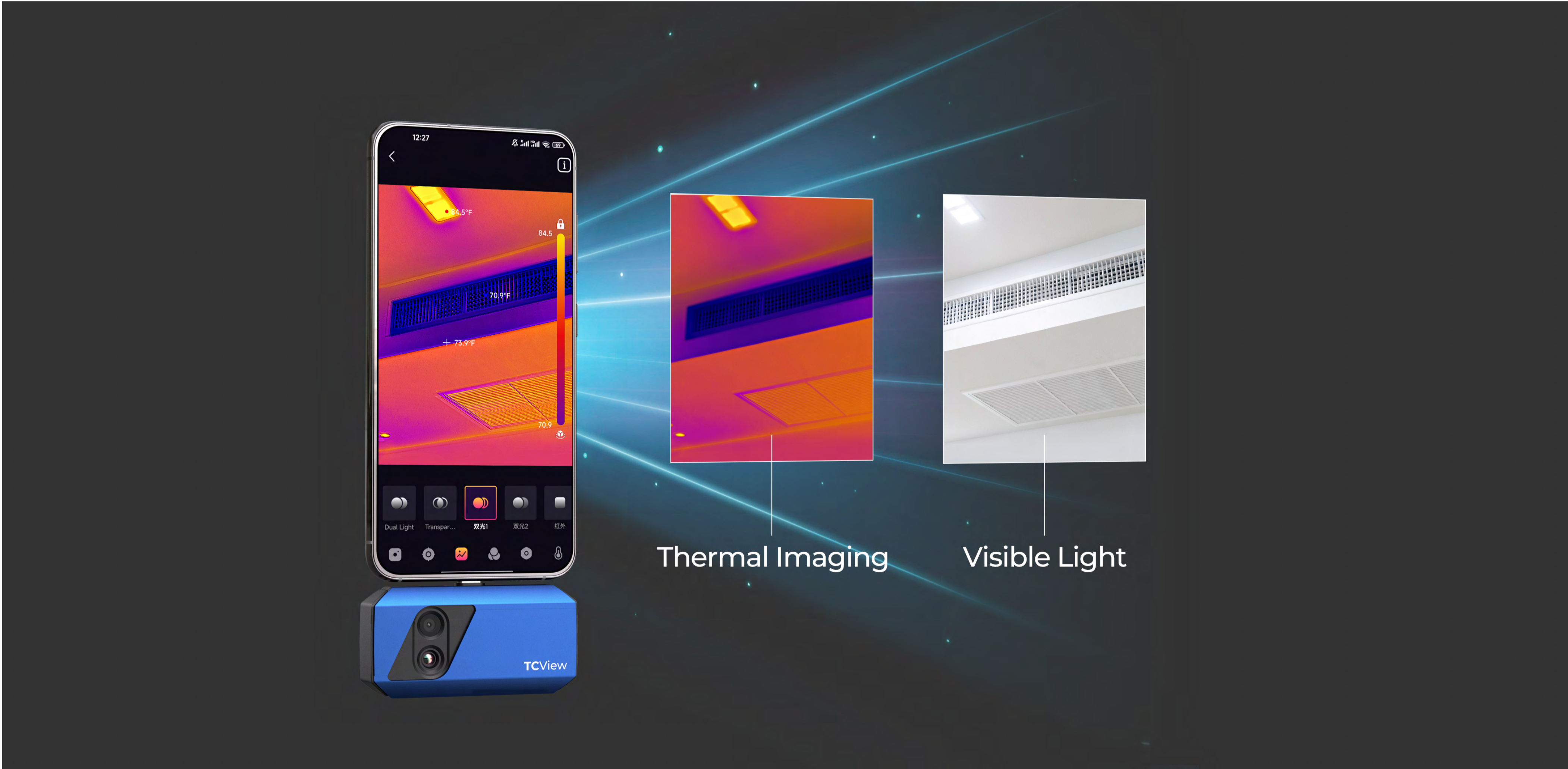
Dual Lens to Unveil the Unseen

TC001 Plus comes equipped with a 100W visible light lens and an infrared lens, along with the image fusion technology to capture targets in original colors and reveal their contours, eliminating any trace of fuzziness.

Thermal Imaging   Visible Light

Dual Lens to Unveil the Unseen

Pipelines, circuits, vehicle engines, floor heating systems, and even objects with subtle temperature variations are effortlessly outlined.
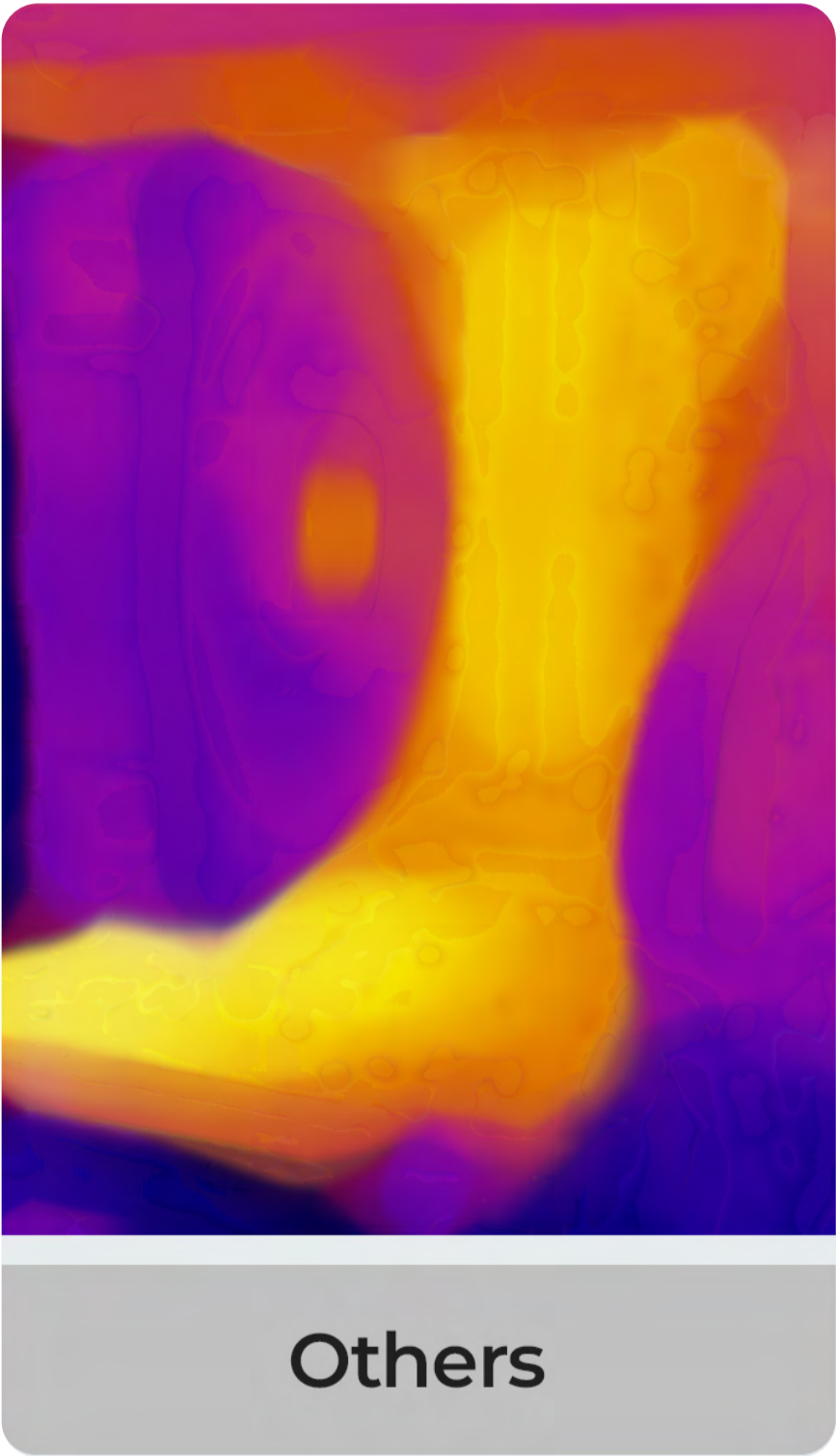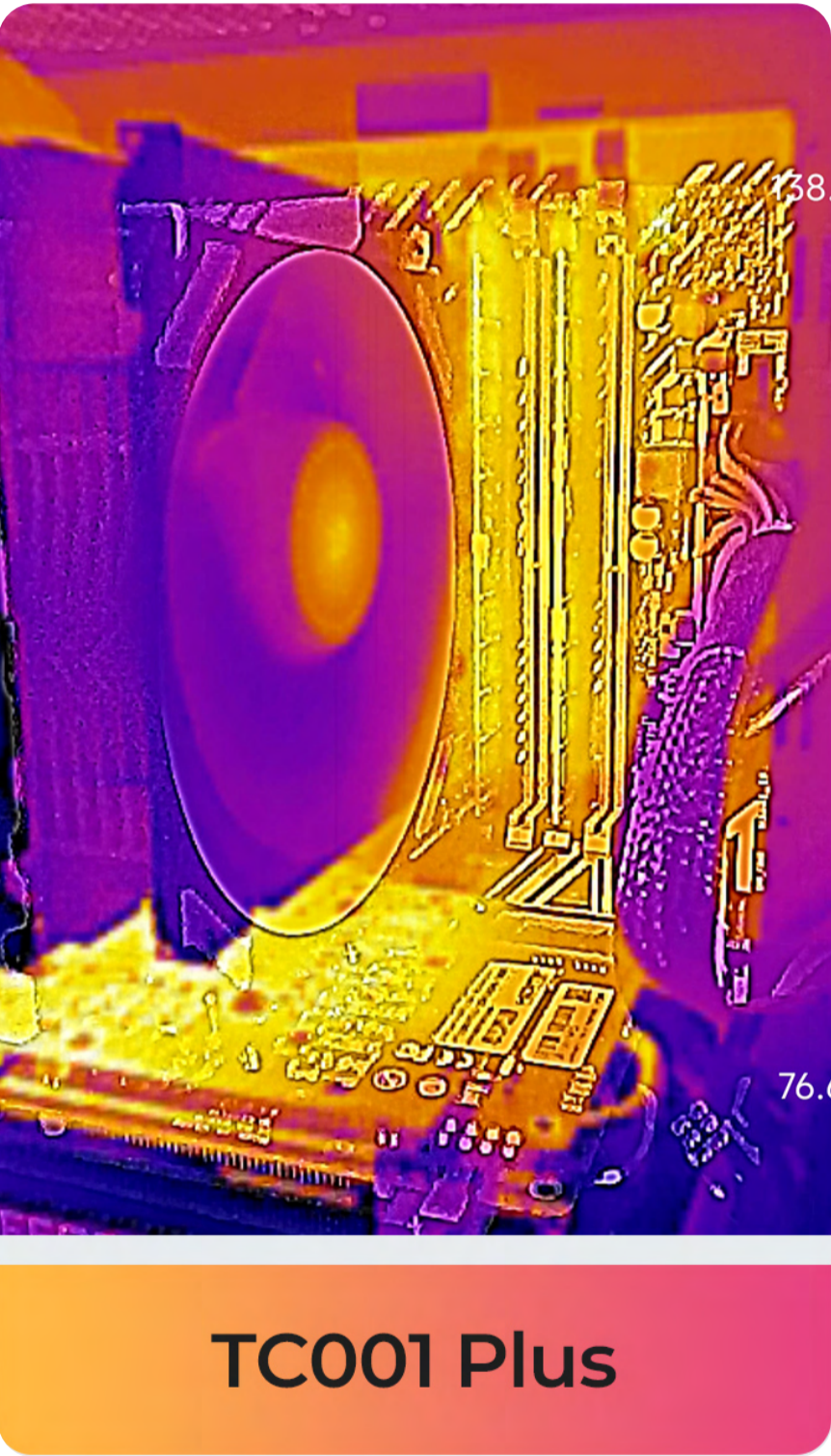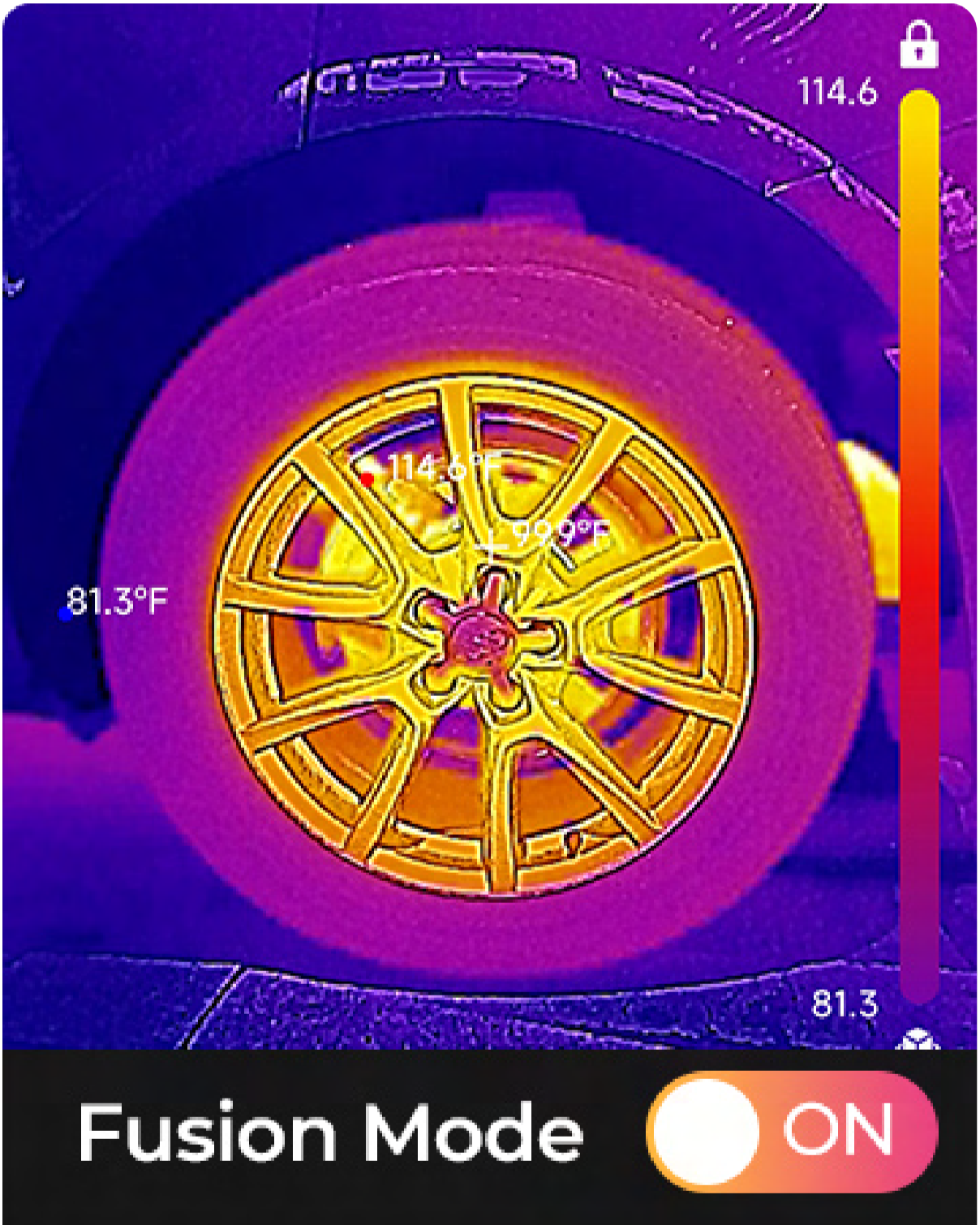

Fusion Mode OFF

Fusion Mode ON

TC001 Plus

Others
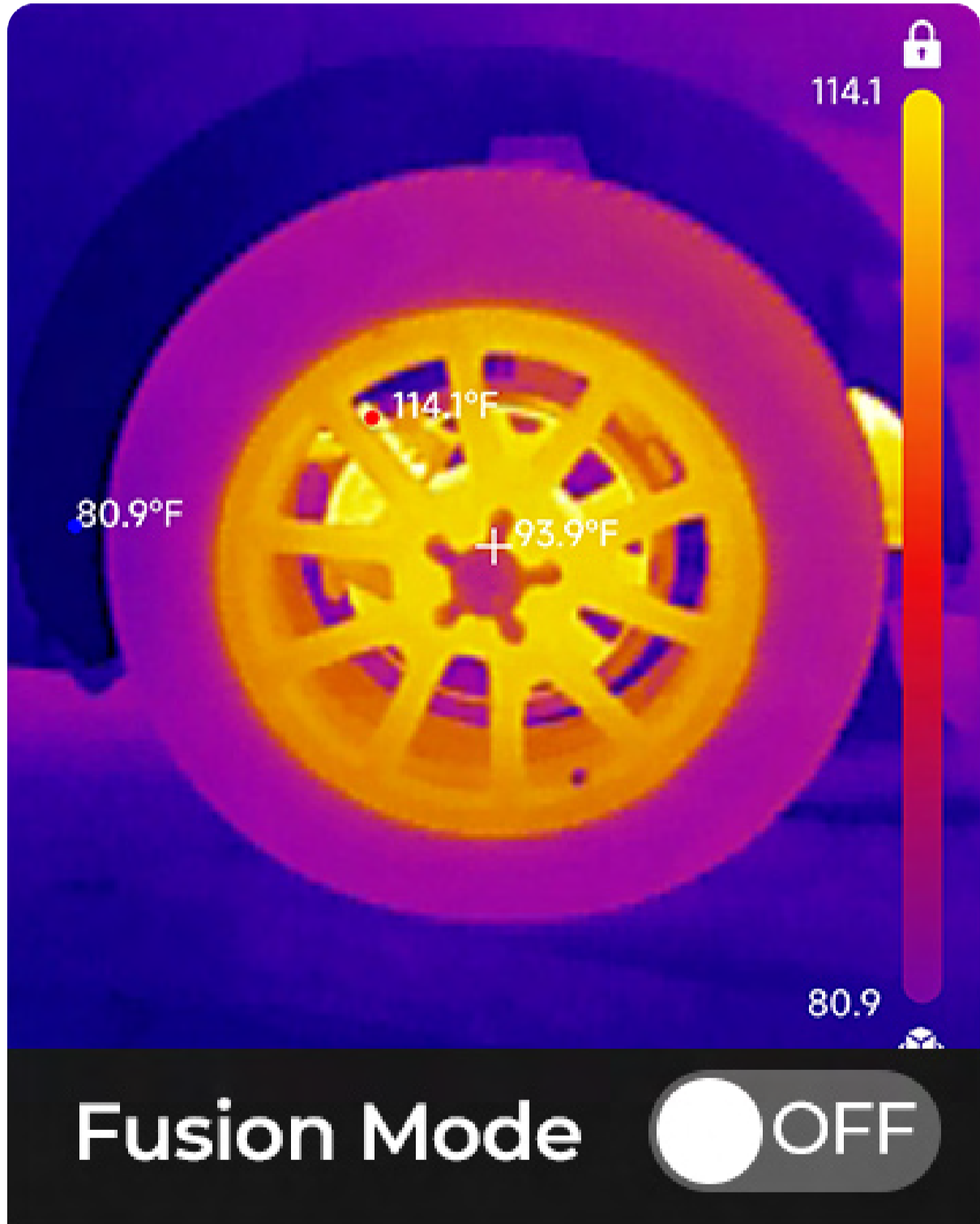
Enhanced Image Quality

Sporting an ultra-high IR camera resolution of 256x192 pixels, TC001 Plus delivers crystal-clear thermal images for precise problem identification. Its 25Hz refresh rate ensures smooth, non-lagging image display, making it easier to identify and analyze details of the targets.
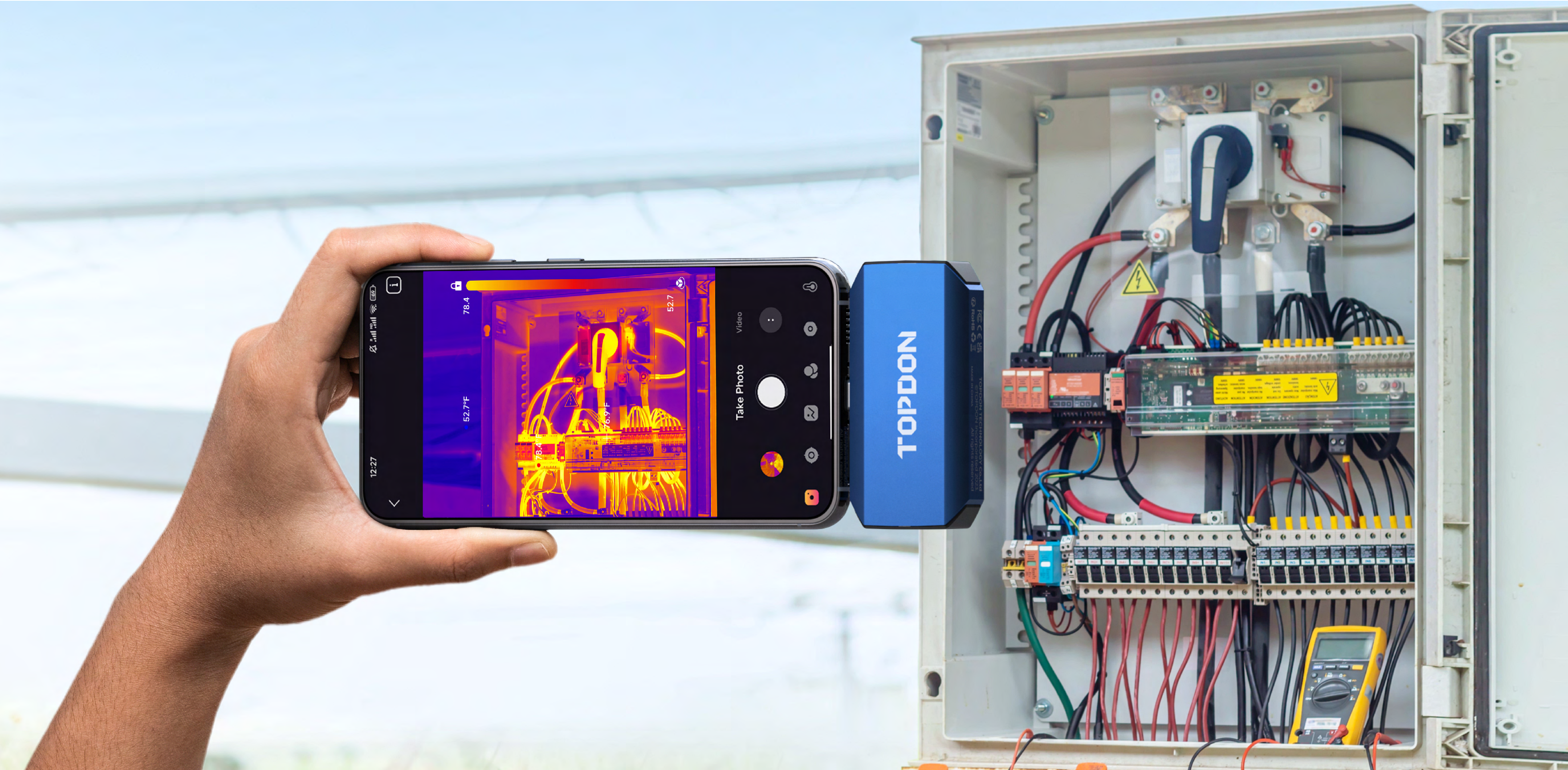
Extensive & Accurate Temperature Measurement

With a temperature range from -4°F to 1022°F (-20°C to 550°C), TC001 Plus delivers precise temperature readings at 3.6°F (2°C) or 2% of the actual temperature and a temperature measurement resolution of 0.1°F (0.1°C).

It also boasts continuous measurement capabilities, generating waveform graphs for intuitive monitoring and facilitating detailed analysis of temperature variations.

-4°F
(-20°C)

1022 °F
(550°C)

TCView

Portable & Durable

Its sleek and rugged design enables you to tackle thermal tasks with ease wherever your adventures take you.
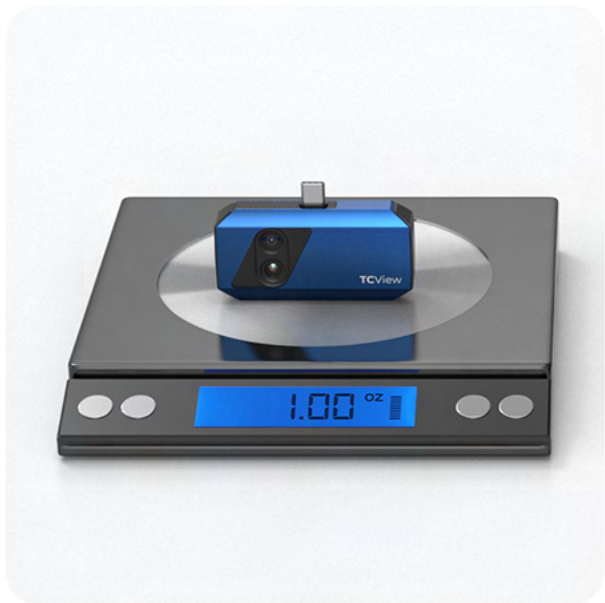
On-the-Go Monitoring
Compact and lightweight, it measures just 2.8x1.65x0.55 inches and weighs a mere 1 ounce (30 grams).

Robust Housing
Built to withstand drops of up to 1m, it guarantees reliability in any scenario.

Various Applications

Electrical
Inspectors

House
Inspectors

HVAC
Inspectors

Auto Mechanics

Engineers

Building Inspectors

Seamless Connection with Thermal Imaging Software

Experience temperature detection and data analysis with
the TCView desktop software and TopInfrared app.
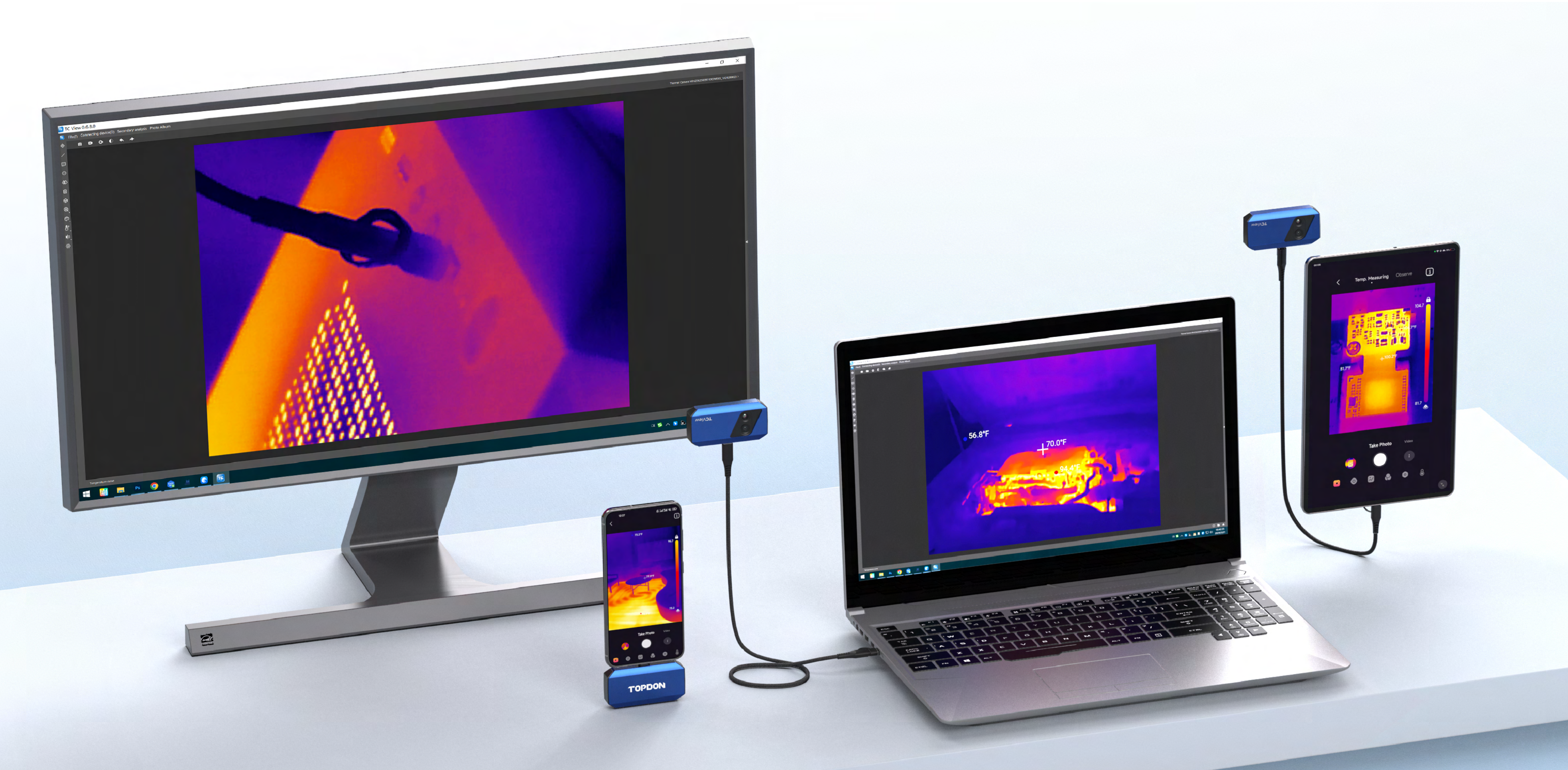
Functions

Three Image Modes:
Thermal, Visual, and
Fusion

3 Temperature Reading
Dimensions: Point, Line,
Surface

DIY Temperature
Limits

Video Recording and
Sharing for Android Phones
and Windows Computers

Monitor Temperature
Change by Waveform
Graph

10 Color Palettes for More
Creative Possibilities

Smart Temperature
Alert

Detailed Reports

What's In The Box?
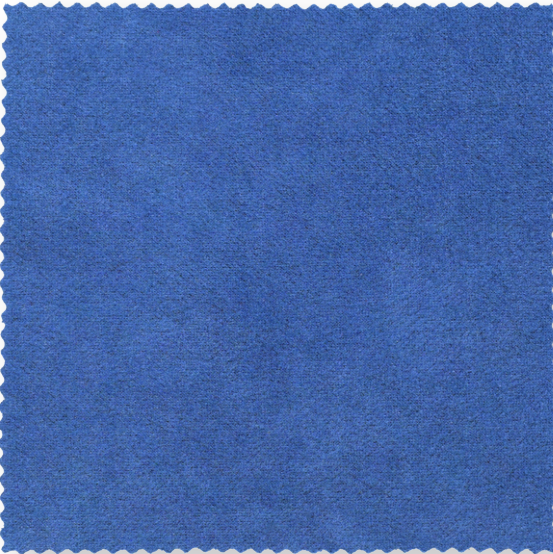
TC001 Plus	Package Box	EVA Carrying Bag
Cleaning Cloth	50cm Multifunctional Extension Cable	Quick User Guide

MODEL / SPECIFICATIONS	TC001	TC001 Plus	TS001	TC002C
Resolution	256*192	256*192	256*192	256*192
Focal Length	3.2mm	3.2mm	9mm	3.2mm
Visible Light Camera	NA	1-megapixel	NA	NA
Measurement Distance	0.1~50m	0.1~50m	0.1~500m	0.1~50m
Measurement Range	-20~550 ℃ (-4~1022 ℉)	-20~550 ℃ (-4~1022 ℉)	-20~550 ℃ (-4~1022 ℉)	-20~550 ℃ (-4~1022 ℉)
Temperature Accuracy	±2°C or ±2%	±2°C or ±2%	±3°C or ±3%	±2°C or ±2%
Temperature Resolution	0.1°C	0.1°C	0.1°C	0.1°C
Frame Rate	25Hz	25Hz	25Hz	25Hz
NETD	<40mK	<40mK	<40mK	<40mK
FOV	56°×42°	56°×42°	13°×10°	56°×42°
Color Palettes	10 Colors	10 Colors	10 Colors	10 Colors
High/Low Temperature Alarm	Yes	Yes	Yes	Yes
Compatible Systems	Android/Windows Devices	Android/Windows Devices	Android/Windows Devices	iOS Devices
Weight	30g	30g	45g	30g
High/Low Temperature Alarm	2.8" x 1.65" x 0.55" (71 x 42 x 14mm)	2.8" x 1.65" x 0.55" (71 x 42 x 14mm)	2.76" x 1.1" x 1.73" (70 x 28 x 44mm)	2.8" x 1.65" x 0.55" (71 x 42 x 14mm)
Languages	13 languages: English, Traditional Chinese, Korean, Japanese, French, Spanish, Italian, Portuguese, German, Polish, Russian, Hungarian, and Turkish	13 languages: English, Traditional Chinese, Korean, Japanese, French, Spanish, Italian, Portuguese, German, Polish, Russian, Hungarian, and Turkish	13 languages: English, Traditional Chinese, Korean, Japanese, French, Spanish, Italian, Portuguese, German, Polish, Russian, Hungarian, and Turkish	13 languages: English, Traditional Chinese, Korean, Japanese, French, Spanish, Italian, Portuguese, German, Polish, Russian, Hungarian, and Turkish

FAQs

Why there is no response after connecting the TC001 Plus to a phone?

Answer

Follow the below steps to identify the problem:
a) Check if the blue LED indicator on the side of the TC001 Plus is on. If not, the device may not be properly connected to your phone, or your phone does not support an OTG functionality.
b) Check if OTG is available in your phone Settings and if it is ON. For most phones, OTG functions are enabled by default and can be used directly. If not, please search "OTG" in Settings and turn it on manually. Please note that the TC001 Plus is not compatible with phones without OTG function.
c) Check if the version of Android is 6.0 or above.
d) Check if you have downloaded the TC001 Plus app and given necessary authorization.
e) Unplug the TC001 Plus and reconnect it. If there is still no response, please contact after-sales personnel.

FAQs

Question

Can the TC001 Plus detect objects underwater, through glass, or a wall?

Answer

No. Infrared detectors mainly detect the long-wave infrared region of 8~14μm, and can only be used to measure surface temperature.

Question

 Why does the temperature reading increase when the device gets closer to the object?

Answer

Infrared radiation attenuates when passing through the atmosphere. The longer the distance, the greater the attenuation. Thus, the accuracy of temperature measurement at a distance will decrease.
To ensure accuracy of measurement, please go to Personal Information - Settings - Temperature Correction - Distance to Spot, and input the actual distance (max: 5m) to get the corrected temperature.

FAQs

Question

Is the TC001 Plus compatible with iOS devices?

Answer

No. The TC001 Plus is ONLY compatible with Android devices and Windows computers.

Question

Why is there a clicking sound? What does "shutter moving" mean?

Answer

The temperature of the infrared imager will change slightly during use. Therefore, a periodic internal temperature calibration is needed. The micro-motor controlled activation or deactivation of such internal calibration makes such a sound, which is known in the industry as "shutter moving".

Brief

Specs

Features

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What's In
The Box?

Comparison

FAQs

FAQs

Question

Why is the measured temperature not precise?

Answer

The temperature resolution of the TS001 is ±2%. And the TC001 Plus provides a normal temperature range of -20~150°C (-4~302°F), and a high temperature range of 150-550°C (302~1022°F). Please select the corresponding range in the app before measuring.

Question

What external factors will affect the infrared temperature measurement?

Answer

The factors are as follows:
a) Emissivity of the target object surface.
b) Ambient temperature: the object will reflect the infrared rays emitted by surrounding objects, which affects the temperature measurement of the object itself.
c) Atmospheric temperature: the atmosphere also emits infrared rays.
d) Atmospheric transmittance: the infrared rays emitted by the object are attenuated in the atmosphere.
e) Distance: the longer the distance, the greater the attenuation of the infrared rays emitted by the object in the atmosphere.

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