



HIKMICRO G Series
Handheld Thermal Camera (V5.5.43)

Release Notes

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(www.hikmicrotech.com/).

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Chapter 1 Introduction

The handheld thermal cameras is an ideal solution which provides accurate touch-free temperature measurement and heat distribution image display for electrical predictive maintenance, building inspection, HVAC inspection, manufacturing monitor, etc. HIKMICRO’s handheld thermal cameras have been used widely in detecting temperature anomalies before detecting radiator efficiency for HVAC inspection, searching for heat loss in buildings, finding hot spots and invisible defects on mechanical or electrical systems that could indicate a potential problem. They are also used for surveying areas that are hard to reach with conventional measurement tools.

This document introduces new features and optimizations in V5.5.43 of G series cameras.

For detailed operation guide, please refer to the user manual of G series handheld thermal camera, V5.5.43.

Version Information

Item	Description
Firmware Version	V5.5.43 build 230412
FPGA Version	V2.04.03 BUILD20230316
Algorithm Version	V2.1.6 build 20230315
Models	G40, G60
Mobile Client	HIKMICRO Viewer, latest version
PC Client	HIKMICRO Analyzer, V1.3.1 HIKMICRO Inspector, V1.2.1

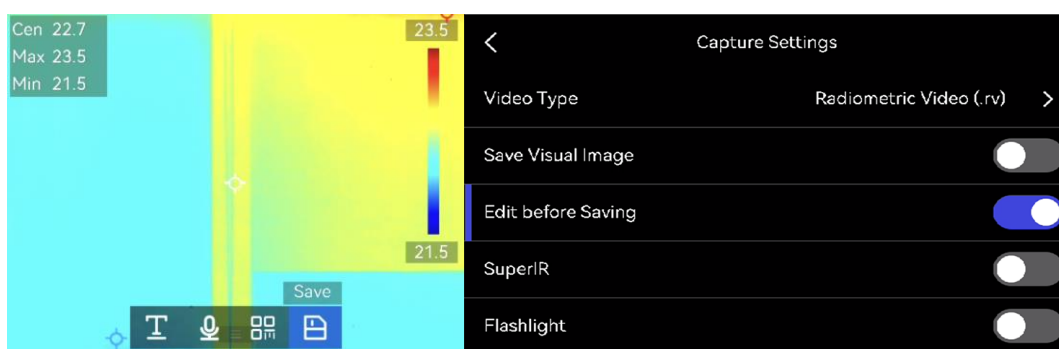
Chapter 2 New Features

2.1 Editing captured images before saving them

You can edit one captured image (adding text note, voice note and QR code information) right after the image is captured, saving you the trouble of locating the images in the albums.

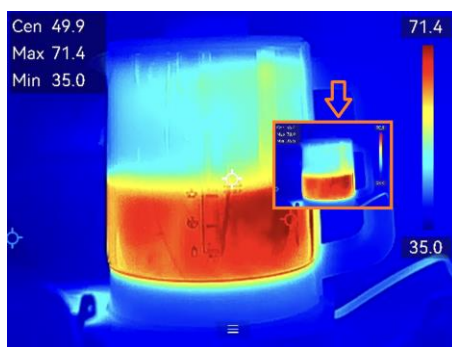
You can enable or turn off the function from **Settings** → **Capture Settings** → **Edit before Saving**.

The function only works when the **Capture Mode (Settings** → **Capture Settings)** is set as **Capture One Image**.



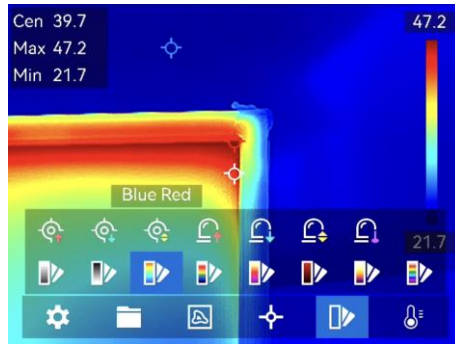
2.2 Thumbnail display after capturing one image

When you set the capture mode as **Capture One Image** and **Edit before Saving** as **OFF**, a thumbnail displays on the screen after capturing.



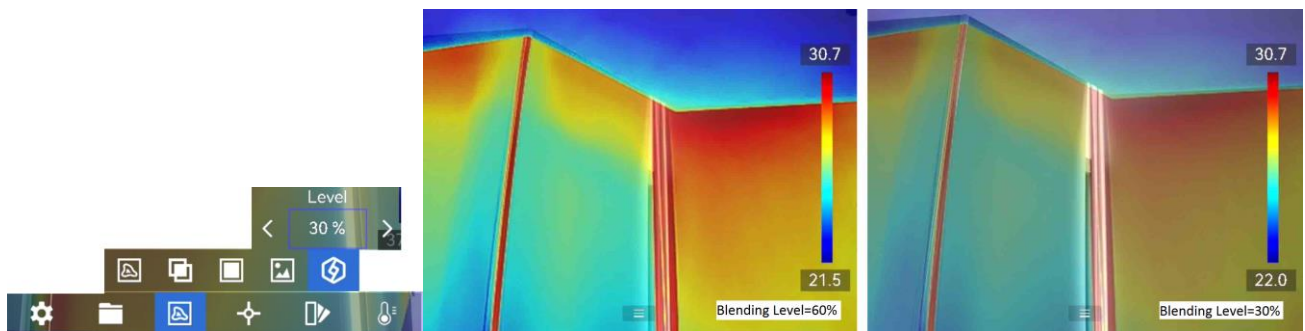
2.3 New palette color available – blue red

In this firmware version, a new thermal palette color, Blue Red, is available. The red end stands for the higher temperature in the scene while the blue end stands for the lower temperature.



2.4 New display mode – blending

Blending mode displays the mixed image of visual and thermal channels with adjustable blending level. Higher level means higher proportion of thermal elements in the image.



2.5 New measurement tools

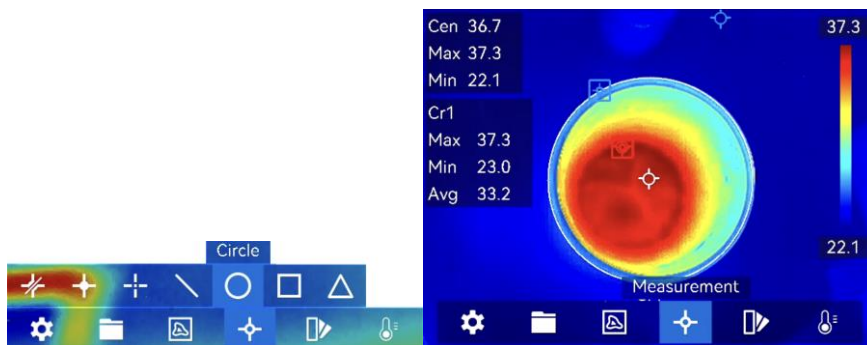
Circle tool and temperature difference (ΔT) tool are supported in this firmware version.

2.5.1 Circle tool












A circle tool suits a round area or object.

To use the tool, select it from **Measurement** and resize the displayed circle to cover the target as much as possible.

Up to 5 circle tools are supported.



Steps

1. Select .
2. Press  or tap  to generate a default circle.
3. Move the circle to the required position.
 - Tap the circle, and press , , , and  to move the circle up/down/left/right.
 - Tap and drag the circle on touch-screen to move it to the required position.
4. Adjust the size of the circle.
 - Tap one point on the circle, and press , ,  to enlarge or contract the circle.
 - Tap and drag one point of the circle on touch-screen to enlarge or contract it.
6. Press  to save the settings.

For more operation and settings, please refer to the user manual of the handheld thermal camera (V5.5.43)

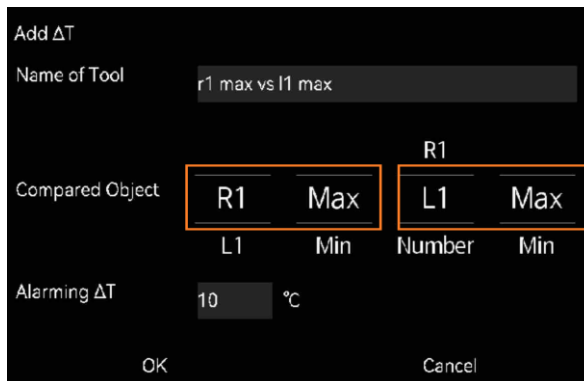
2.5.2 Temperature difference (ΔT) tool

By comparing the temperature difference (ΔT) between configured measurement tools, or between a measurement tool and a fixed temperature, device can recognize temperature exception more accurately and rapidly. This function is commonly applied to measure temperature-sensitive targets such as current transformers.

To use ΔT tool, you should set at least one other measurement tool (spot, line, rectangle, or circle) in advance.

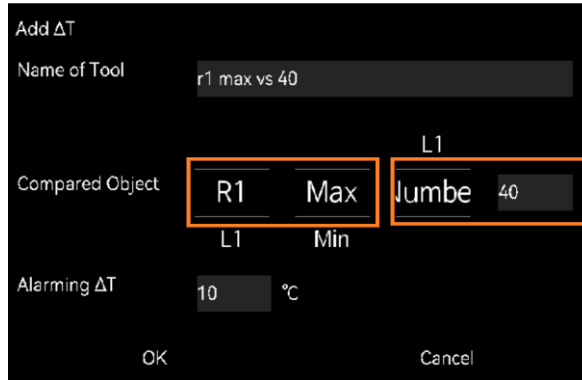


- Monitoring the temperature difference tested by one or two different measurement tools. The following screenshot shows a ΔT setting example of comparing two tool-tested values.

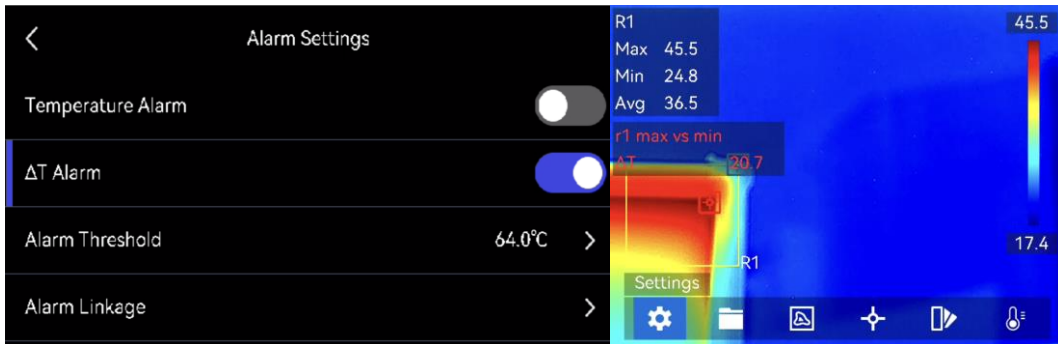


- Monitoring the temperature difference between a fixed temperature value and a tool-measured value.

The following screenshot shows a ΔT setting example of comparing a tool-tested maximum temperature to a fixed temperature 40 °C.



You can also set an Alarming ΔT . When you enable ΔT Alarm (**Settings** → **Capture Settings** → **Alarm Settings**) and the ΔT tool-tested value exceeds the set Alarming ΔT , the results displayed on screen turns red and other configured linked alarm actions (for example, flashing light and audible warning) are triggered (set at **Alarm Linkage**).



For more operation and settings, please refer to the user manual of the handheld thermal camera (V5.5.43)

2.6 Adjusting thermal parameters of image on your local device and exporting reports

In this firmware version, you are able to edit and analyze radiometric images and generate PDF reports on your device. The PDF reports are saved in the memory card. Export reports to PC for reading.

Visit the local album and select an image to start editing.



Steps

1. Press to enter **Albums**, and select and enter an album folder.
2. Select an image file and press to call the editing menu.
3. Tap to enter editing interface.




4. Press or tap to call the main menu.

Modify the image display mode, measurement parameters and tools, palettes, and level & span modes. For detailed operation guide, please refer to the user manual of the handheld thermal camera (V5.5.43).

5. Tap  on the upper right corner of the screen to generate a pdf report.
6. When finishing all operations, tap  to save the change and exit the editing interface.

2.7 Device sleep mode supported

In sleep mode, device screen is off to conserve your battery's charge.

Press  to enter sleep mode and press it again to wake the device up.

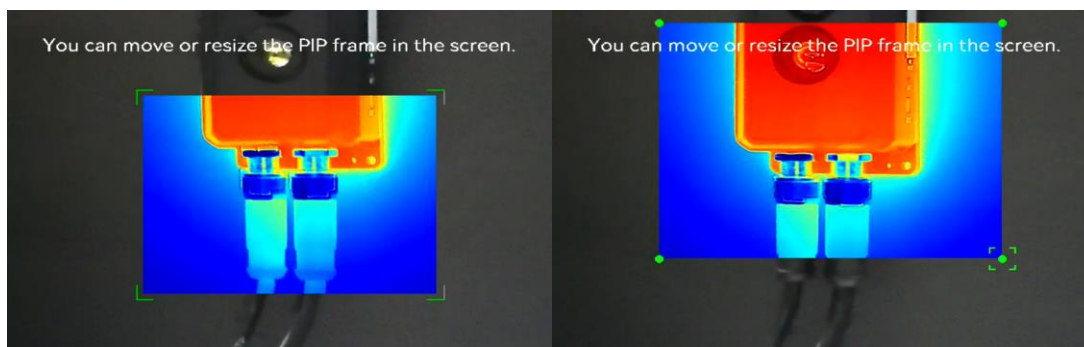
You can also set device auto sleep from **Settings** → **Device Settings** → **Auto Sleep**. When there is no button pressing or screen tapping operation on device for more than the set waiting time, device enters sleep mode automatically.

2.8 Resizing PIP frame freely

With this version, you are able to adjust the size and position of the PIP frame.

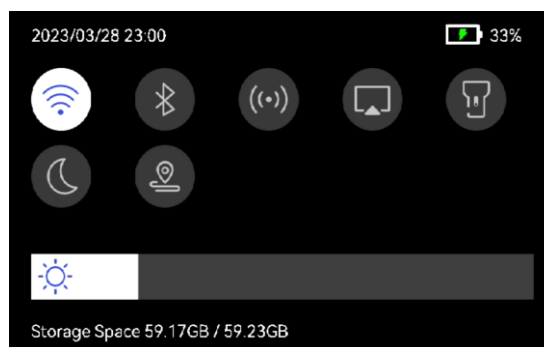
Drag the interior thermal image frame (the left picture) to adjust its position.

Drag a corner of the thermal image frame (the right picture) to adjust its size.



2.9 Swipe-down menu for function quick settings

In live view interface, swipe on screen from upper to lower to call the swipe-down menu. With this menu, you can turn on/off device function, change display theme, and adjust screen brightness.

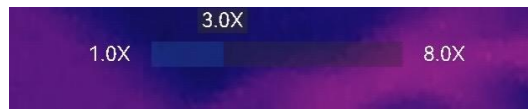


2.10 Smoother digital zoom

This version allows more digital zoom operation to achieve better zooming effect.

In the live view interface, press ▾ to enter the digital zoom setting interface.

- Hold ◀ or ▶ to zoom in or zoom out continuously.



- Press ◀ or ▶ to fine-tune the zooming ratio.



- Tap the zooming ratio slider, and drag it to the left or right to adjust zooming ratio.

Chapter 3 Optimizations

HIKMICRO G series handheld thermal cameras have been optimized to improve your experience.

- User interface layout and interaction improved.
- Measurement tools (including spot, line, rectangle and circle): Offered independent and more convenient settings of temperature measurement parameters and result display control for each individual tool.
- Measurement tools: the number of available rectangle tools is adjusted to 5.
- Manual mode operation of Level & Span improved.
- Introduced albums to manage local images and videos.
- Route inspection improved.



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