



HIKMICRO G Series
Handheld Thermal Camera (**V5.5.87**)
Release Notes

Legal Information

© Hangzhou Microimage Software Co., Ltd.
All rights reserved.

About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only.

The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the HIKMICRO website

(www.hikmicrotech.com/).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

Trademarks



and other HIKMICRO's trademarks and logos are the properties of HIKMICRO in various jurisdictions. Other trademarks and logos mentioned are the properties of their respective owners.

LEGAL DISCLAIMER

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS MANUAL AND THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, ARE PROVIDED "AS IS" AND "WITH ALL FAULTS AND ERRORS". HIKMICRO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE USE OF THE PRODUCT BY YOU IS AT YOUR OWN RISK. IN NO EVENT WILL HIKMICRO BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA, CORRUPTION OF SYSTEMS, OR LOSS OF DOCUMENTATION, WHETHER

BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR OTHERWISE, IN CONNECTION WITH THE USE OF THE PRODUCT, EVEN IF HIKMICRO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS. YOU ACKNOWLEDGE THAT THE NATURE OF THE INTERNET PROVIDES FOR INHERENT SECURITY RISKS, AND HIKMICRO SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER-ATTACK, HACKER ATTACK, VIRUS INFECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKMICRO WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

YOU AGREE TO USE THIS PRODUCT IN COMPLIANCE WITH ALL APPLICABLE LAWS, AND YOU ARE SOLELY RESPONSIBLE FOR ENSURING THAT YOUR USE CONFORMS TO THE APPLICABLE LAW. ESPECIALLY, YOU ARE RESPONSIBLE, FOR USING THIS PRODUCT IN A MANNER THAT DOES NOT INFRINGE ON THE RIGHTS OF THIRD PARTIES, INCLUDING WITHOUT LIMITATION, RIGHTS OF PUBLICITY, INTELLECTUAL PROPERTY RIGHTS, OR DATA PROTECTION AND OTHER PRIVACY RIGHTS. YOU SHALL NOT USE THIS PRODUCT FOR ANY PROHIBITED END-USES, INCLUDING THE DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR EXPLOSIVE OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATTER PREVAILS.

TABLE OF CONTENTS

1	Introduction	1
1.1	Version Information	1
1.2	How to Upgrade to New Version	1
1.2.1	Upgrade with PC	1
1.2.2	Upgrade with the Latest HIKMICRO Viewer APP	2
2	New Features	3
2.1	New User Interface.....	3
2.1.1	New Style of the User Interface	3
2.1.2	Other UI Experience Improvement	4
2.2	New Functions in Albums.....	4
2.2.1	Exporting Files via Bluetooth is Available.....	4
2.2.2	Editing Asset ID is Available	4
2.2.3	Multiple On-device Files Download to Mobile Phone is Supported	4
2.2.4	File Size and User-modified Time are Available in the File Details	5
2.2.5	Picture Note and Tag Note are Available for Radiometric Images	5
2.3	Palettes Bar Can be Hidden.....	6
2.4	Modifying the Measurement Tools in Live-view is Supported.....	6
2.5	LIVE Analysis Updates	7
2.6	RTSP Protocol Updates	7
2.7	New Updates in System Settings	7
2.7.1	Screen Brightness Updates	7
2.7.2	Time and Language Settings.....	7
2.8	Change in Recording Videos	7
2.9	SmartTemp is Available (Only G31).....	8
3	Optimizations	9
3.1	Temperature Measurement Rules Configuration Updates	9
3.2	Editing Image Supports Displaying or Hiding the Time and Date	9
3.3	Swipe-down Menu Interaction Optimization	10
3.4	GPS Info Display Optimization	10
4	FAQ on Upgrade.....	11
4.1	Why my PC failed to detect the camera as a USB drive?	11
4.2	What should I do when my PC notifies power surge on the USB port?	11
4.3	What should I do when my PC notifies USB device not recognized?.....	11
4.4	What should I do if my PC notifies the USB drive has a problem to be fixed?	12

1 Introduction

The handheld thermal camera 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 V5.5.87 of Gx0 and Gx1 Series (hereinafter referred to as G Series) cameras.

1.1 Version Information


Item	Description
Firmware Version	V5.5.87 build 241210
FPGA Version	G40, G60: V2.04.05 BUILD20241107 G31: V1.00.16 BUILD20241125 G41, G61, G41H, G61H: V1.00.16 BUILD20241121
Algorithm Version	V2.2.0 build 241022
Models	G40, G60, G31, G41, G61, G41H, and G61H
Mobile Client	HIKMICRO Viewer: the latest version
PC Client	HIKMICRO Analyzer: V1.7.1 HIKMICRO Inspector: the latest version

1.2 How to Upgrade to New Version

1.2.1 Upgrade with PC

Before upgrading your device, make sure:

- Device battery is fully charged.

- Auto Power-off function is turned off to avoid accidental suspension during upgrading.
 - A memory card has been installed to device.
1. Connect the device to your PC with cable.
 2. Select **USB Drive** on the pop-up USB Mode window of the device.  will be displayed on the device status bar, and a notice for detected disk will pop up in your PC.
 3. Click the disk on your PC to open it.
 4. Select and copy the upgrade file, and paste it to the root directory of the device.



Make sure that the upgrade file pasted to the root directory is extracted.

5. Disconnect the device from your PC.
6. Reboot the device and then it will upgrade automatically. The upgrading process will be displayed in the main interface.



After upgrading, the device reboots automatically. You can view the current version in **Device Settings >Device Information**.

1.2.2

Upgrade with the Latest HIKMICRO Viewer APP

Connect your device to HIKMICRO Viewer APP and tap on **Device Upgrade** to check device firmware version and proceed online upgrading.

Download and install HIKMICRO Viewer to your phone. Search the APP name in your APP store, or scan the following QR code.



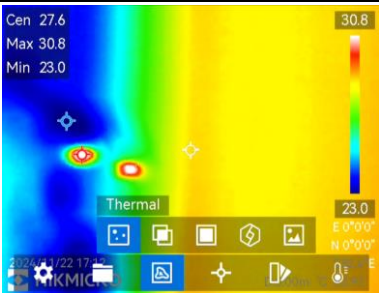
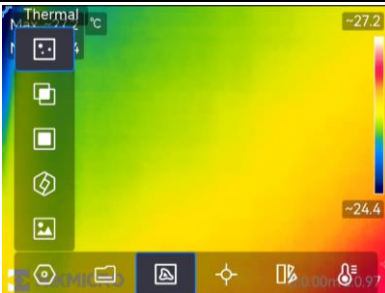
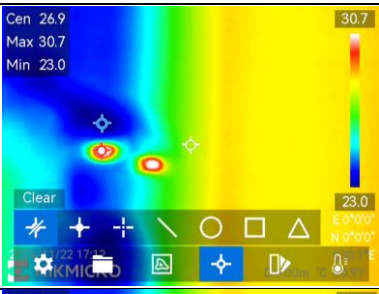
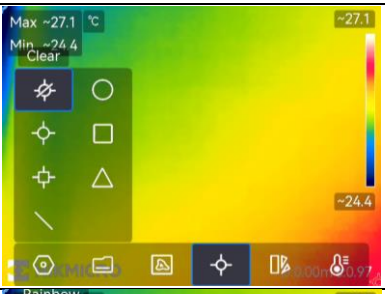
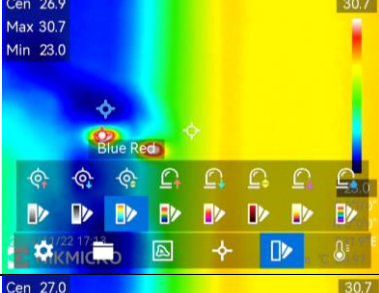

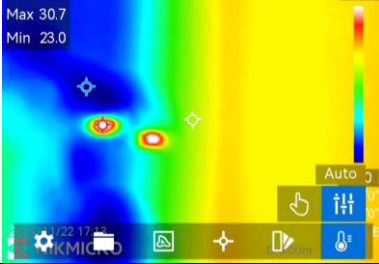

Make sure that you download and install the latest version of HIKMICRO Viewer.

2 New Features


2.1 New User Interface

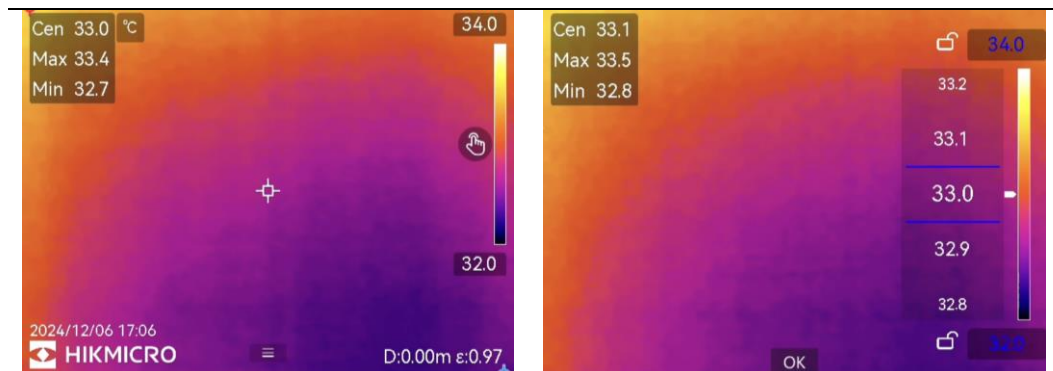
2.1.1 New Style of the User Interface

This version updates the user interface icons and their distribution, including Settings, Albums, Image Mode, Measurement, Palettes, Level & Span, and Temperature Unit.

Function	Before	Now
Image Mode		
Measurement tools		
Palettes		
Level & Span		

2.1.2 Other UI Experience Improvement





In the Live view, users can press  on the left side of temperature scale to quickly adjust the temperature range.



2.2 New Functions in Albums

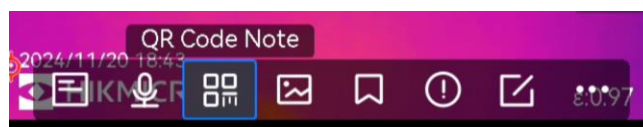
2.2.1 Exporting Files via Bluetooth is Available

The device can be connected to mobile phones with Android system via Bluetooth, and users can transmit image files to the phone. Users can export files to the mobile phones following the steps:

1. Enter to the device Albums, and select an image.
2. Press  or tap any part of the screen to call the editing menu.
3. Tap  >  to select a Bluetooth device.
4. Choose the paired phone Bluetooth in the available Bluetooth list.
5. Press  to confirm.

2.2.2 Editing Asset ID is Available

In the Albums interface, users can edit QR code note to add a new asset ID or change the existed asset ID.



2.2.3 Multiple On-device Files Download to Mobile Phone is Supported

Before downloading files, users need to download and install HIKMICRO Viewer to the mobile phone. After connecting the mobile phone to the APP,

users can select **On-Device Files** to enter device local albums. Tap on a picture and then tap download to save it to the APP Album.

2.2.4 File Size and User-modified Time are Available in the File Details

The File Details contains basic information of the file. Users can view file size in the new version.

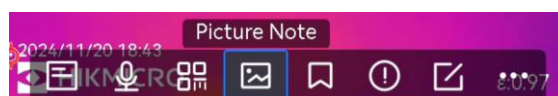
Saving Time	2024/11/20 18:43:24
Last Modified	2024/11/20 18:43:24
File Size	518 KB
IR Resolution	384*288
Visual Camera	3264*2448
Emissivity	0.97
Refl. Temp.	25.0°C

2.2.5 Picture Note and Tag Note are Available for Radiometric Images

Visual Picture Note

Up to 3 visual pictures are supported to save with the radiometric image, providing referential information of the detection scene.

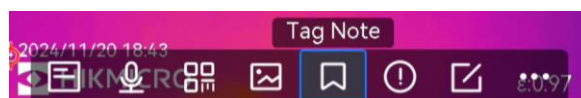
Users can take the visual pictures before saving the captured radiometric images, or view and change the saved visual pictures when editing images in Albums.



Tag Note

Tag note templates contain the predefined tag name and options. With a template imported and activated, users can quick add tags to captured images.

Users can edit tag note before saving the captured radiometric images, or view and change the tag notes when editing images in Albums.

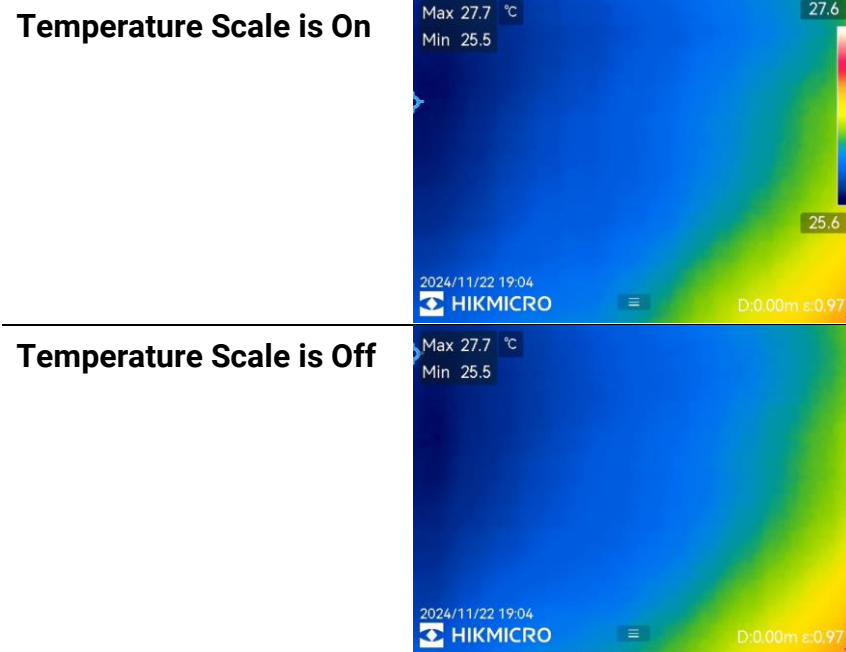


Before adding tag note to images, tag note templates should be loaded to device. The templates are generated on the client software HIKMICRO

Analyzer. Copy templates to the storage of the device, then users can use and manage the templates.

2.3 Palettes Bar Can be Hidden

It is available to show or hide the palettes bar in live view. Tap  > **Display Settings > Temperature Scale.**



2.4 Modifying the Measurement Tools in Live-view is Supported

Users can tap the customized measurement tools on the screen to modify the tools and hide or display the tools and measurement results.



2.5 LIVE Analysis Updates

The device supports connecting the HIKMICRO Analyzer for live analysis, either via USB or network connection. With USB connection, users can adjust the focus mode, control manual calibration, and set temperature ranges through the client. However, network connection does not support these functions. Live analysis function of HIKMICRO Analyzer supports V1.7.1 or higher version.

2.6 RTSP Protocol Updates

RTSP is supported to obtain real-time temperature matrix for the use of the third party applications.

2.7 New Updates in System Settings

2.7.1 Screen Brightness Updates

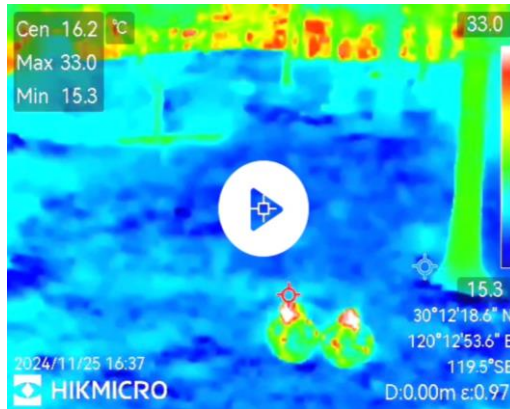
Auto-brightness of the screen is enabled by default (G31, G41, G61, G41H, and G61H are supported).

2.7.2 Time and Language Settings

After the device starts up, users can set the language and time immediately. If users refuse to set the time and date this time, they can still set it when they turn on the device next time.

2.8 Change in Recording Videos

GPS information can be displayed in offline recording of radiometric videos. (G31, G41, G61, G41H, and G61H are supported).



2.9 SmartTemp is Available (Only G31)

Users can go to **Settings> Temp Measurement Settings> SmartTemp**, and then open the switch. This function is more suitable for laboratory metrology certification. It can improve temperature measurement accuracy in the following scenarios:

- The target size is fixed, but the detection distance varies.
- The detection distance is fixed, but the target size varies.



Note

SmartTemp is not recommended in complex application scenarios.

3 Optimizations

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

3.1 Temperature Measurement Rules Configuration Updates

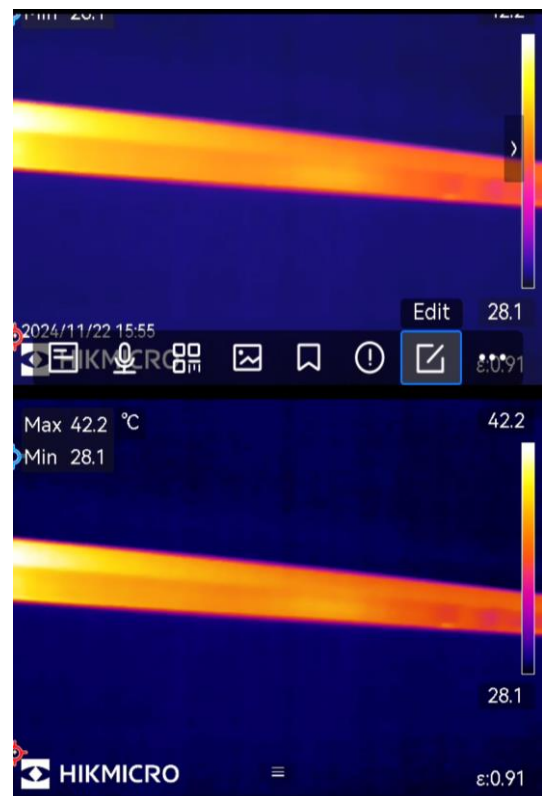
When users add and edit temperature measurement rules in live-view or images, the default values for emissivity and measurement distance use the current temperature measurement emissivity and measurement distance.

3.2 Editing Image Supports Displaying or Hiding the Time and Date

The second edit of thermal images can display or hide the time and date. Go to **Display Settings > Time and Date**, and then edit the image.

Time and Date is On

Time and Date is Off




3.3 Swipe-down Menu Interaction Optimization

The effective area of the swipe-down menu for interaction has been adjusted to the top one-third of the screen.

3.4 GPS Info Display Optimization

Modify the GPS information display to show north-south direction at the top and east-west direction at the bottom (G31, G41, G61, G41H, and G61H are supported).

Go to **Settings > Device Settings > GPS** to enable the satellite positioning modules, and you can see the location displayed at lower right corner of the screen.

Before	Now
 N 20°10'20" E 120°20'09"	30°12'18.6" N  120°12'53.6" E

4 FAQ on Upgrade

4.1 Why my PC failed to detect the camera as a USB drive?

Check the following items:

- Use a good quality type A to type C USB cable to connect your PC to your camera. The supplied cable is recommended. Normally, a cable should be able to charge a camera and transfer data.
- Keep USB Cast Screen function off.
- Keep the microSD card inserted and do not remove it during connection.
- Keep the camera powered on.

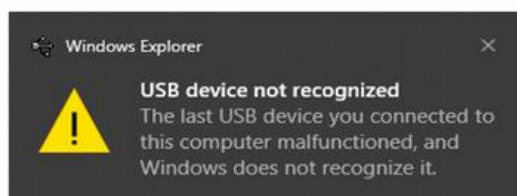
4.2 What should I do when my PC notifies power surge on the USB port?



Check the following items:

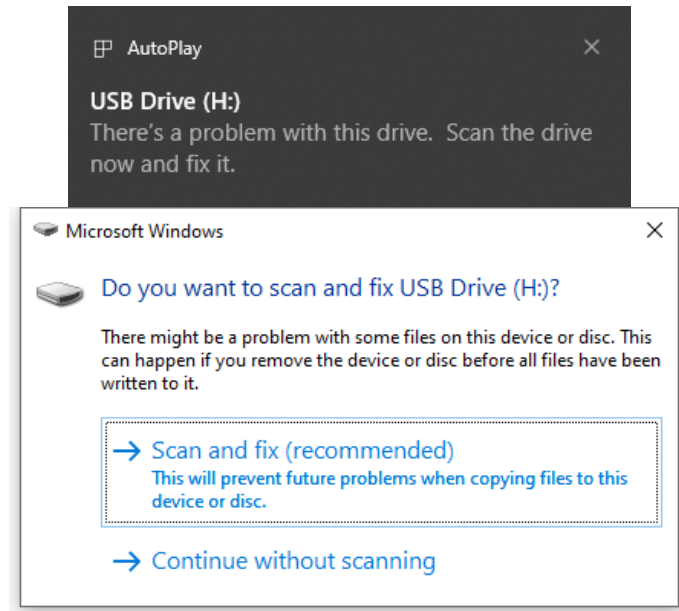
- When you are looking for an adapter of USB type C to USB type A, please choose an unpowered hub. A powered hub such as Surface Dock Station is not compatible.
- If you are using a built-in USB PowerShare port in your PC, please try another port.

4.3 What should I do when my PC notifies USB device not recognized?



In most cases, it does not affect use. You can just ignore the prompt and find the detected USB drive in **This PC**. If the USB drive is not found, please try to Restore/Initialize the camera.

4.4 What should I do if my PC notifies the USB drive has a problem to be fixed?



Some Windows computers will scan a USB drive when it is connected, and show the error. Click scan and fix, Windows will confirm the drive is fine and connect to it. You can also skip scanning and find the detected USB drive in **This PC**, which does not affect use in most cases.



HIKMICRO

See the World in a New Way