



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

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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.

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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 M Series.

1.1 Version Information

Item	Description
Firmware Version	V5.5.87 build 241210
FPGA Version	M30: V1.04.03 BUILD20241111
Models	M30
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.



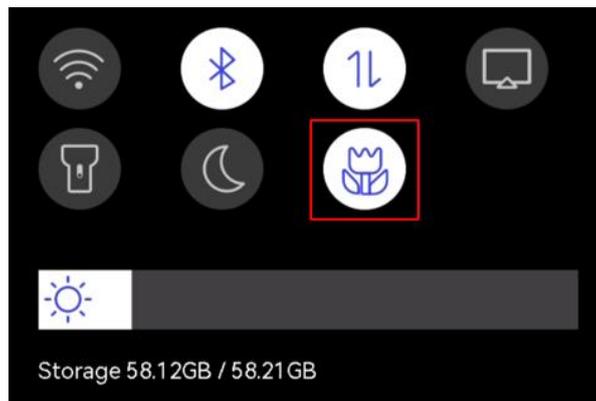
Make sure that you download and install the latest version of HIKMICRO Viewer.

2 New Features

2.1 New User Interface

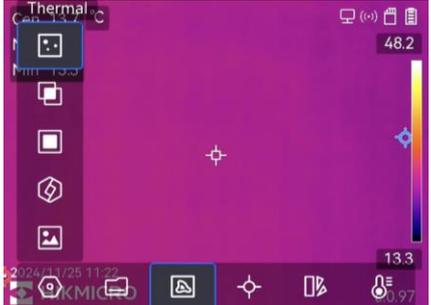
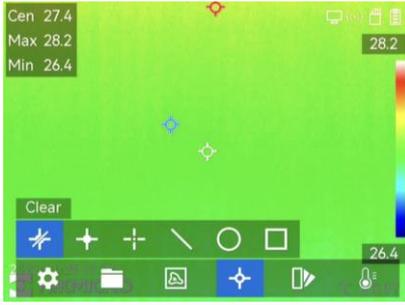
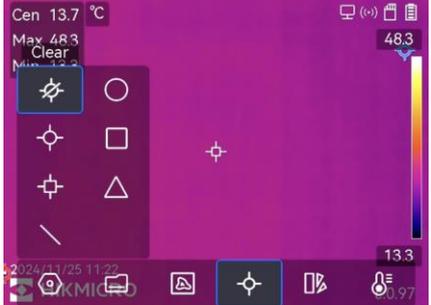
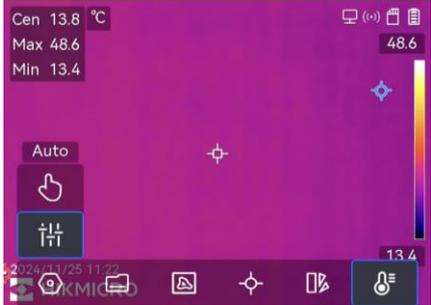
2.1.1 Added Shortcut Keys for Macro Mode

In live view interface, the swipe-down menu adds shortcut keys for macro mode. With this key, users can turn on/off macro mode quickly.



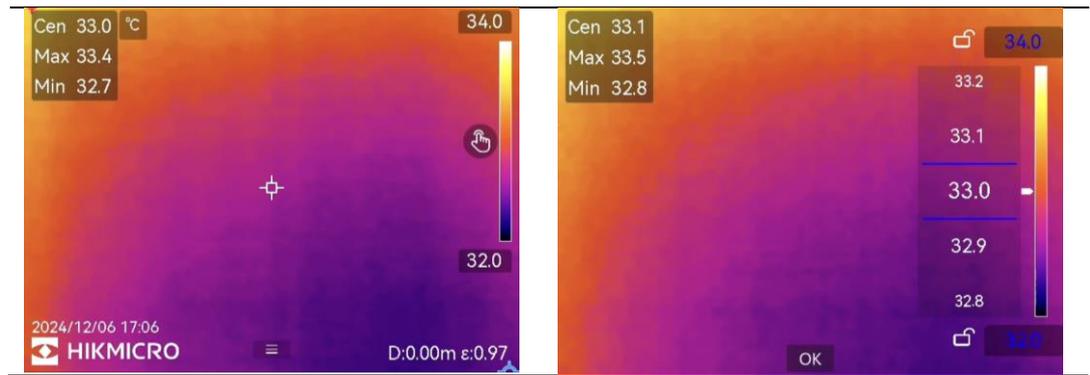
2.1.2 New Style of the User Interface

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		

2.1.3 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

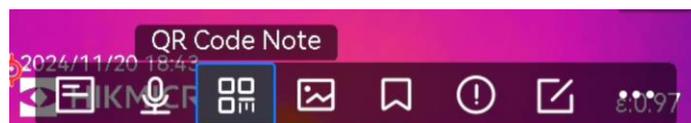
2.2.1 Exporting Files via Bluetooth is Available

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.



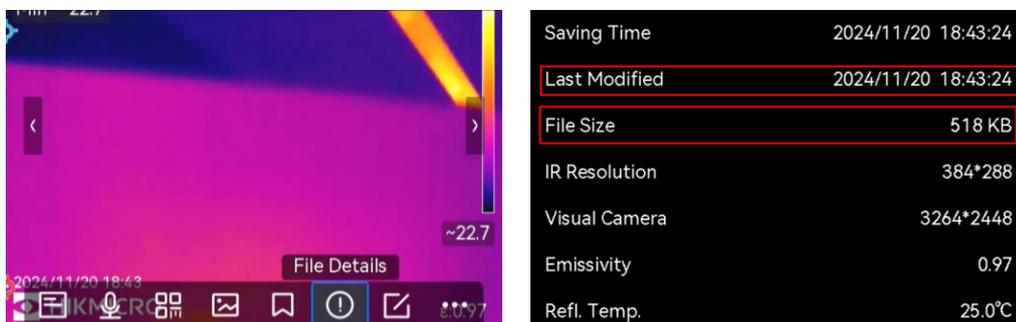
2.2.3 Multiple On-device Files Download to Mobile Phone is Supported

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.

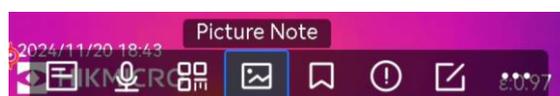


2.2.5 Picture Note and Tag Note are Available for Radiometric Images

Visual Picture Note

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

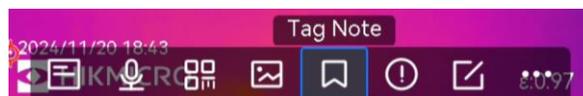
Users can take the visual pictures before saving the captured radiometric images, or view and change the saved visual pictures when editing images in Albums.



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.

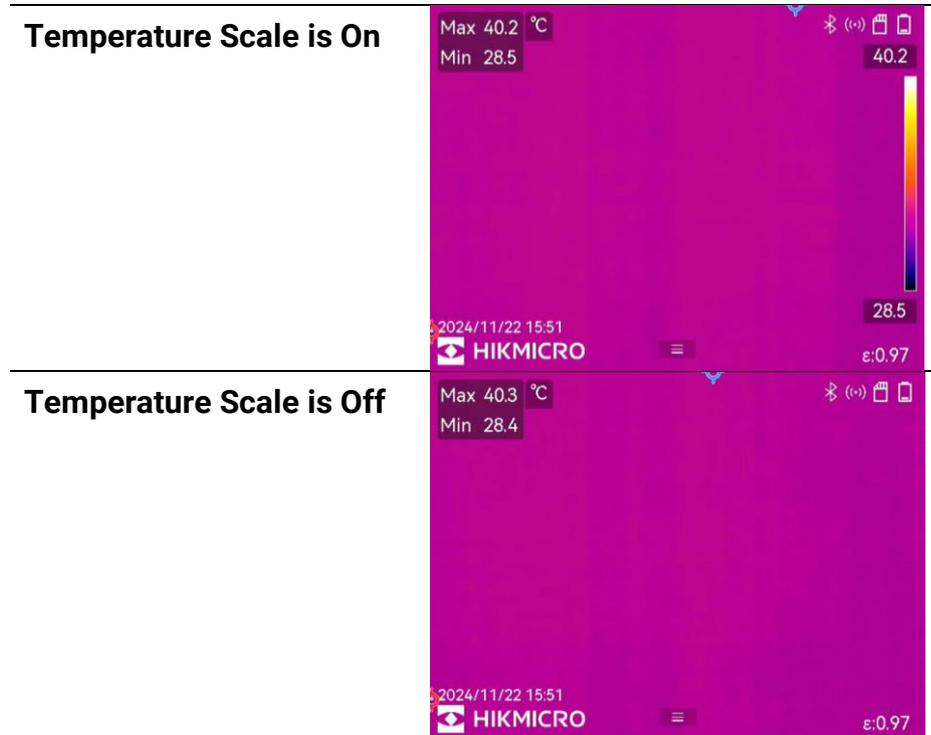
Users can edit tag note before saving the captured radiometric images, or view and change the tag notes when editing images in Albums.



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.

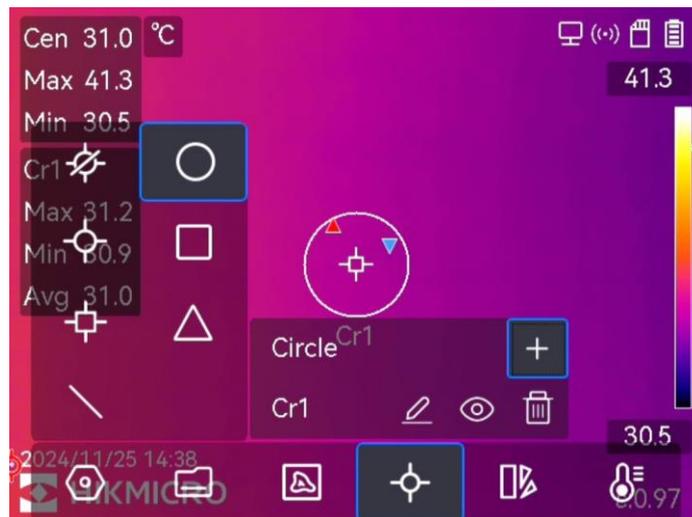
2.3 Palettes Bar Can be Hidden

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



2.4 Modify 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 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 Time and Language Settings Updates

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 SmartTemp is Available (Only M30)

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

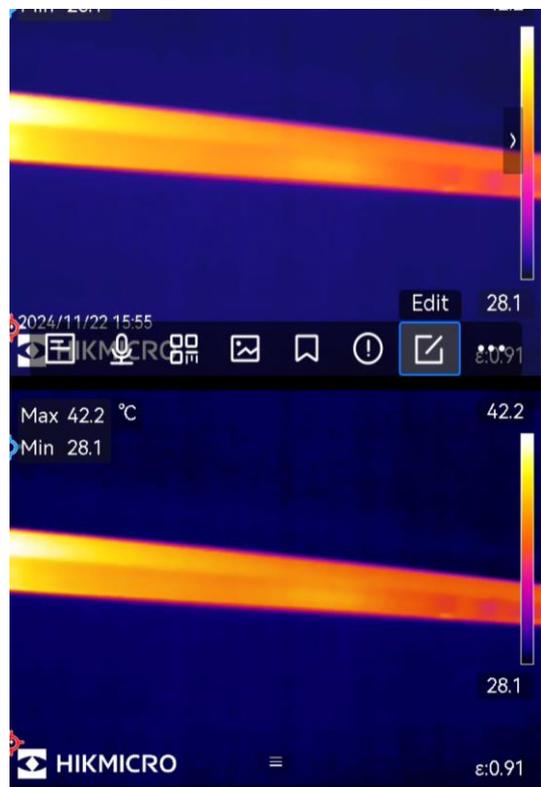
3.1 Temperature Measurement Rules Configuration Updates

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.

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.

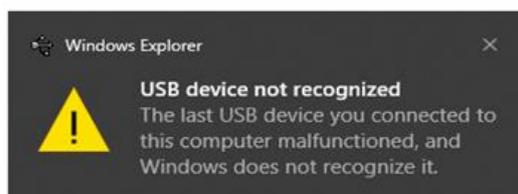
4.2 What should I do when my PC notifies power surge on the USB port?



Check the following items:

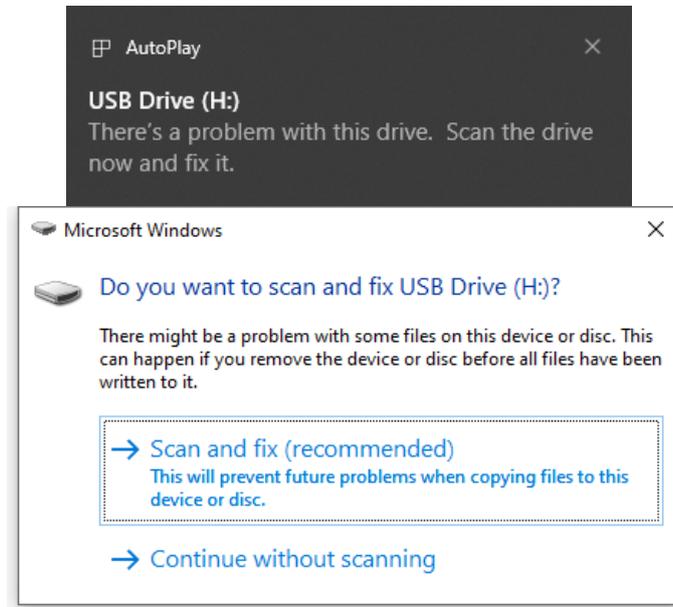
- When you are looking for an adapter of USB type C to USB type A, please choose an unpowered hub. A powered hub such as Surface Dock Station is not compatible.
- If you are using a built-in USB PowerShare port in your PC, please try another port.

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

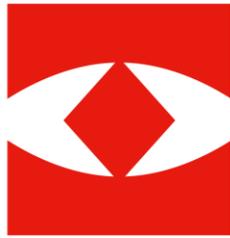


In most cases, it does not affect use. You can just ignore the prompt and find the detected USB drive in **This PC**. If the USB drive is not found, please try to Restore/Initialize the camera.

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.



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