



HIKMICRO Viewer Android Mobile Client

User Manual

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Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Note	Provides additional information to emphasize or supplement important points of the main text.

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Chapter 1 Introduction

Overview

HIKMICRO Viewer Mobile Client allows you to remotely manage and control handheld thermal cameras via Wi-Fi, 3G or 4G networks, and use the smartphone module via Type-C connection. After logging in to a device on the Mobile Client, you can do operations such as viewing live video, detecting the variation of temperature, measuring real-time temperature, measuring temperatures of points and areas on captured pictures, and generating reports after analyzing captured pictures.



Note

- Wi-Fi, 3G or 4G access service must be supported by the phone or tablet.
 - Network traffic charges may be produced when using the Mobile Client. Please refer to the local ISP.
-

System Requirements

Android 7.0 or later versions

Conventions

To simplify description, we define "HIKMICRO Viewer Mobile Client" as "the Mobile Client", and "smartphone module and handheld thermal camera" as "device" in the following chapters.

Chapter 2 Download the Mobile Client

You can download the Mobile Client through the following method.

Android

Scan the QR Code below to download the Mobile Client.



Figure 2-1 QR Code

Chapter 3 Log in to Device

The software provides two methods for searching for handheld thermal cameras, namely, searching for a device by manually entering its IP address, and automatically detecting device(s) in the same LAN with phone or tablet. After that, you can log in to the device and perform further operations such as temperature measurement and device firmware upgrade on the software. For smartphone thermal cameras, after logging in to the device, you can perform further operations such as live view and temperature measurement on the software.

3.1 Handheld Thermal Camera

3.1.1 Log in to Detected Online Device

The devices in the same Local Area Network (LAN) with your phone can be detected automatically and you can select one of them to log in to.

Steps



Note

- For thermographic automation cameras, thermographic cube cameras, and security thermal cameras, you can only log in to them manually. See [***Manually Log in to Device***](#) for details.
-

1. On the home page, tap **Handheld Device**.

Three methods for connecting device(s) and your phone to a same LAN will be displayed on the page as follows:

- Method 1: Connecting device(s) to your phone's hotspot.
 - Method 2: Connecting your phone to the device's hotspot.
 - Method 3: Connecting device(s) and your phone to a same Wi-Fi.
-



Note

If this is not the first time you connected the device to the phone, you can tap **Help** to view the instructions for device connection.

2. Select a method and follow the wizards to connect your phone and device(s) to a same LAN.

The software starts searching the device(s) in the same LAN with the phone's (or tablet's), and then the detected device(s) will be displayed.

3. Select a device.

4. Activate the device if it has not been activated.



Note

- Skip this step if the device has been activated.
- See **Activate Device** for details about how to activate a device.

5. Enter the device password on the pop-up window and then tap **Confirm** to log in to the device.



Note

The device password is created when you activate it. See **Activate Device** for details.

3.1.2 Manually Log in to Device

If the software fails to detect device in the same LAN with your phone (or tablet), you can try manually logging in to the device.

Before You Start

Make sure the device and the phone (or tablet) are in the same LAN, or the device has been connected to the phone's hotspot.

Steps

1. On the home page, tap **Handheld Device** → **Manual Login** to enter the Manual Login page.
2. Enter the IP address of the device.



Note

You can go to **Settings** → **Device Information** on the device to check the device's IP address.

3. Enter the device password.



Note

The initial password of the device is abcd1234.



Note

We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

4. Tap **Confirm** to log in to the device.

If the device has already been activated, you will log in to the device directly.

If the device is inactivated, you should activate it first. For details about activating device, see **Activate Device**.

3.1.3 Activate Device

When you log in to a device, if the device has not been activated yet, a window will pop up to ask you to activate the device.

Steps



Note

You must activate the device before you can access it.

1. Log in to the device. See [Log in to Detected Online Device](#) and [Manually Log in to Device](#) for details.
 2. Tap **Activate** on the window to open the Activate Device window.
 3. Create a password for the device and confirm the password.
-



Caution

The software will judge password strength automatically, and we highly recommend you to use a strong password to ensure your data security. A strong password ranges from 8 to 16 characters, and must contain at least two of the following categories: number, lowercase, uppercase and special character.

4. Tap **Activate** to activate the device.
-

3.2 Smartphone Module


3.2.1 Log in to Smartphone Module

Smartphone module is an IR(Infrared) thermal imaging accessory with Type-C plug. After logging in to the device, you can perform operations such as temperature measurement.

When you insert the smartphone module into the Type-C port of your phone, the device will be automatically logged in and then you will enter the live view.



Note

In live view page, you can tap  to return to the home page. If the smartphone module has not been unplugged after you return to the home page, you can tap **Smartphone Module** to enter the live view again.

3.3 Device Settings

On the Device Settings page, you can view device information, edit device name, upgrade device firmware, control live view audio, control alarm notification, and log out device.

After logging in to a device, you can tap  to enter the Device Settings page.

The following functions are only supported by smartphone modules.

Unit

You can select Celsius, Kelvin, and Fahrenheit as temperature unit.

High Temp

When **High Temp** is switched on, **Alarm Threshold** will be enabled. You can set a threshold value as needed. When the device detects a temperature which is equal to or higher than the set value in live view, a high-temperature alarm icon will appear at the top of the screen. Your phone will vibrate and meanwhile its pre-set prompt tone will be played.



Note

- This function is supported by both temperature screening smartphone module and thermographic smartphone module.
 - For temperature screening smartphone modules, the valid threshold range is 30 to 40 °C. The default value is 37.5 °C.
 - For thermographic smartphone modules, the valid threshold range is 20 to 500 °C. The default value is 55 °C.
 - For Thermographic smartphone module, if you have set more than one frames on the live video image, and if one of these frames has first detected the abnormal temperature and triggered the high-temperature alarm, the other frame(s) will not trigger the high-temperature alarm.
-

Skin-Surface Measurement

When **Skin-Surface Measurement** is enabled, the skin-surface temperature will be automatically adjusted to the core body temperature.

QSG

You can view the quick start guide for smartphone modules.

Factory Reset

Restore the device to its factory settings.

The following functions are only supported by handheld thermal cameras.

View Device Information

You can view the device information including device model, serial number, and the current device firmware version.

Edit Device Name

You can customize the name of a device to distinguish it from other devices when searching online devices.



Note

The device name should contain 1 to 16 characters.

Upgrade Device

When a new version of device firmware is available, **New Version** will be displayed in red in the **Device Upgrade** field.

You can tap **New Version** and then follow the prompts to download the upgrade package and then upgrade the device firmware.



Note

- Downloading upgrade package is only available in the Wide Area Network (WAN). You should switch to the WAN first if your phone is not connected to the WAN.
- When upgrade completes, the device will be automatically rebooted. And during rebooting, the device will be temporarily unavailable for logging in to.

Control Live View Audio

You can switch on **Sound** to receive and play the live audio of the device.

Control Alarm Notification

You can switch on **Alarm Notification** to receive high-temperature alarm notifications from the device. See [**Alarm Notification**](#) for details.





Note

Make sure you have enabled and configured alarm settings such as alarm threshold on the device. Otherwise, you will not receive any notification even if **Alarm Notification** is turned on in the software. For details about configuring alarm settings, see the user manual of the device.

Chapter 4 Live View

After logging in to the device, the live video of the device will play automatically. You can perform operations such as palettes configuration, temperature measurement, and capture and recording.

Note

- For handheld thermal cameras, during live view, tap  /  to lock/unlock the screen orientation.
- For smartphone thermal cameras, when the device detects a temperature which is equal to or higher than the set value in live view, a high-temperature alarm icon will appear at the top of the screen. Your phone will vibrate and meanwhile its pre-set prompt tone will be played.

4.1 Switch Thermal/Optical View






You can switch the image mode among thermal mode, optical mode, PIP mode, and combined mode. This function is only supported by handheld thermal cameras.

Tap the following icons in the toolbar to switch the image mode.

Note

The icons displayed are dependent on the device capability.

Table 4-1 Image Mode Descriptions

Icon	Name	Description
	Thermal	In thermal mode, the device displays thermal view.
	PIP	In PIP (Picture in Picture) mode, the device displays thermal view inside optical view.
	Optical	In optical mode, the device displays optical view.
	Combined	In combined mode, the device displays the combined view of thermal channel and optical channel.
	Blending	Drag to the left and right to adjust the visible light ratio.

4.2 Set Fusion Mode

Visual and thermal image fusion is the combination of two images of a scene, aiming to improve the visual perception or feature extraction. You can modify fusion settings by image calibration to improve the clarity of the live video image.




This function is only supported by smartphone module.

On the top of the Live View page, swipe left or tap **Fusion** to enter the fusion mode.



If you use the fusion function for the first time, you need to calibrate the image.

Tap , take a photo, adjust the size and location of the photo to match the thermal image, and tap **Save** to modify the previous fusion settings.




If the image fusion failed due to the facts such as distance and field of view, you can adjust the distance to the object.

4.3 Set Thermometry Parameters

Before temperature measurement, you should set thermometry parameters including emissivity, background temperature, and background temperature, etc. Inappropriate thermometry parameters will affect the accuracy of temperature measurement.


Steps


1. Swipe to the left on the toolbar to view all the icons on it.
2. Tap  and then tap the appearing icons to set thermometry parameters.


-  Set the value to the emissivity of the target material.



The emissivity of the surface of a material is its effectiveness in emitting energy as thermal radiation. See **Common Material Emissivity Reference** for emissivity of common materials.

-  Set the straight-line distance (unit: m) between the target and the device.


-  Set the average temperature (unit: °C) of the environment. Only supported by handheld thermal cameras.

-  Set temperature unit. You can select Celsius, Fahrenheit, or Kelvin. Only supported by handheld thermal cameras.

4.4 Measure Spot's Temperature in Live View

The software can locate the spot with the highest temperature, the spot with the lowest temperature, and the center spot on the live video image. You can view the above-mentioned spots' real-time temperatures during live view.

Note




- If you have started live view for a long time, you should tap  to calibrate the device first to ensure the accuracy of the temperature measurement.
 - During live view, you can check the device's remaining power based on the battery icon on the lower-left.
-


Center Spot Thermometry

Tap  →  to display the real-time temperature of the center spot of the live video image as

 . And tap the icon again to hide the temperature.

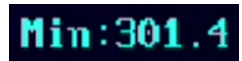
Hot Spot Thermometry

Tap  →  to display the spot with the highest temperature as  and its real-time temperature



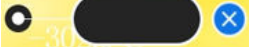


as  on the image. And tap the icon again to hide the spot and its temperature.

Cold Spot Thermometry

Tap  →  to display the spot with the lowest temperature as  and its real-time temperature as

 on the image. And tap the icon again to hide the spot and its temperature.

Custom Spot Thermometry

Tap  →  to display the custom spot with its real-time temperature as  on the image. You can drag  to move the spot to get real-time temperatures at different locations. And tap  to delete the spot.

Note

- For temperature screening smartphone modules, you can set only one spot on the live video image.
 - For thermographic smartphone modules, you can set up to 3 spots on the live video image.
-

4.5 Measure Frame's Temperature in Live View

You can set frames on the live video image and the software will measure the highest temperature, lowest temperature, and average temperature in the frame.

Steps



Note

- If you have started live view for a long time, you should swipe the toolbar to the right and then tap to calibrate the device first to ensure the accuracy of the temperature measurement.
- During live view, you can check the device's remaining power based on the battery icon on the lower-left.

1. Tap → on the toolbar to set a frame on the live video image.



Note

- For smartphone modules, you can also click and drag to draw a rectangle measurement tool on the image.
- You can set up to 3 frames on the live video image.
- For temperature screening smartphone modules, you can set only one frame on the live video image.

2. **Optional:** Edit the frame.

Move Frame	Drag the frame to move it.
Delete Frame	Tap Delete above the frame to delete it.
Adjust Shape and Size	Drag a vertex of the frame to adjust the frame's shape and size. You can also spread fingers apart and pinch them together inside the frame to adjust its shape and size.

3. Tap areas outside of the frame on the image to confirm the frame settings.

The the highest temperature, lowest temperature, and average temperature in the frame will be displayed.

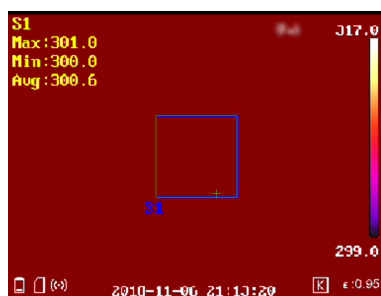


Figure 4-1 Frame's Temperature

4. **Optional:** Tap the image and then tap the frame to edit the frame again.

4.6 Set Palettes for Live Video Image

The palette is the color scheme used to display a thermal image. You can select different palettes modes, including white hot, black hot, fusion, rainbow, ironbow, red hot, and rain.



Note

For handheld thermal camera, in optical mode, palettes settings is not supported. See **Switch Thermal/Optical View** for details.

Tap  and then select a palettes mode.

White Hot

The hot part is light-colored in view.

Black Hot

The hot part is black-colored in view.

Rainbow

The target displays multiple colors, it's suitable for scene without obvious temperature difference.

Ironbow

If the color is close to yellow, the temperature is high. If the color is close to purple, the temperature is low. In this mode, the target object's outline is clear and the hotspot is easy to find. This mode is usually applied to the power industry.

Red Hot

The hot part is red-colored in view.

Fusion

The hot part is yellow-colored and the cold part is purple-colored in view.

Rain


The hot part in the image is colored, and the else is blue.



Blue Red

The hot part in the image is red-colored, and the else is blue.

4.7 Adjust Level & Span

Changing the temperature levels can makes it easier to analyze a temperature anomaly. There are two modes for adjusting the temperature scale, including Auto and Manual. This function is only supported by smartphone module.

Tap  , and switch the mode as needed:

- Tap  and drag the bottom and top levels up and down in the temperature scale to manually adjust the temperature.
- Tap . The temperature scale will be automatically adjusted by Mobile Client for the best image brightness and contrast.

4.8 Manually Record Video and Capture Picture

You can record video manually and capture pictures during live view.

Steps


1. Log in to the device.





See ***Log in to Device*** for details.

2. Record video or capture pictures.

Capture Picture

- Tap **Picture** →  to capture a picture.
- Press the Volume Up button of the phone to capture pictures. The interval for capturing pictures is 1 second.
- This function only supports radiometric images.

Record Video

Tap **Video** →  to start recording the live video and then tap  to stop.



- Make sure there are at least 512 MB available storage space on your phone.
 - The valid recording duration is from 2 seconds to 2 minutes.
-

The recorded videos and captured pictures can be viewed and managed in the Picture & Video Management page. For details, refer to ***Picture and Video Management***.

4.9 Start Two-way Audio

Two-way audio enables the voice talk between the Software and the device, allowing you (the Software user) and the device user to communicate mutually in real time. This is useful in various usage scenarios. For example, assume that you need to instruct the installation of thermography devices at the entries and exits of a company in a city where a pandemic outbreaks, you can do remote instruction by two-way audio instead of instruction on site to avoid the risk of infection.



This function is only supported by handheld thermal cameras.

After log in to a device on the Software, tap  to start two-way audio.



If you receive phone call or exit the Software during two-way audio, two-way audio will be ended.

Chapter 5 Alarm Notification

The software can notify you when there is a high-temperature alarm triggered on the device, allowing you to check alarm details such as alarm time, current temperature, and captured pictures. This function is only supported by handheld thermal cameras.



Note

To receive alarm notifications in the software, make sure you have:

- Enabled and configured alarm settings such as alarm threshold on the device. For details about configuring alarm settings, see the user manual of the device.
 - Turned on alarm notification in the software. See ***Device Settings*** for instructions.
-

After turning on alarm notification, an alarm window will pop up during live view when an alarm occurs. You can also view all alarms in Alarm History.

Alarm Pop-up Window

Alarm pop-up window displays alarm information such as the highest detected temperature, configured alarm threshold, and captured optical and thermal pictures.

You can tap **Acknowledge** to acknowledge the alarm, or dismiss the alarm and acknowledge it later in Alarm History.

Alarm History

Tap  to enter the Alarm History page.

In Alarm History, you can view all alarms in chronological order. You can also tap any alarm to view detailed alarm information and acknowledge or delete the alarm.

To acknowledge or clear all alarms, tap  and then tap **Acknowledge All** or **Clear**.

Chapter 6 Picture and Video Management

In Picture and Video Management module, you can view and manage the recorded video files and the captured pictures. For the captured pictures, you can measure the temperatures of the spots and frames on the picture, set alarm temperature to highlight temperature exceptions, set different palette modes for thermal analysis, and generate reports after analyzing captured pictures.



Note

In Picture & Video page, there are two pictures and one video which can be used for all functions of the Picture and Video Management module.

6.1 View Pictures

You can view the captured pictures in the Picture and Video Management page.

Steps

1. Enter the Picture and Video Management page.
 - On the home page of the Mobile Client, tap **Picture & Video**.
 - In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.



Note

- You can also view the latest captured picture by tapping the thumbnail. After tapping the larger picture, you can tap to edit the picture according to the following steps.
- You can tap to return to the Live View page quickly.

2. Tap a specific picture to view the larger picture.

3. **Optional:** Tap → to edit the picture.

Set Contrast

Tap **Contrast** to set the range of temperature for thermal analysis so as to filter out unnecessary colors on the picture.

Auto

The temperature range will be from the lowest temperature to the highest temperature on the original image.

Manual

Drag the red line on the temperature bar to set the temperature range.

1-Tap

After selecting this mode, tap the picture and the frame for measurement will be displayed automatically. You can move the frame to adjust its location, or drag a vertex of the frame to adjust its size.

During adjustment, the Level & Span of the picture will change simultaneously.

The highest and the lowest temperature of the frame area are the upper and the lowest limit of the contrast range respectively.

Note

After switching to Auto or Manual mode, the adjustment of the frame will be saved automatically and the frame will hide. After switching back to 1-Tap, the measurement tools set in the other modes will hide, and only the frame of 1-Tap mode will be displayed.

Switch Temperature Unit	Tap Temp. Unit to switch the temperature unit displayed on the picture.
Set Remark	Tap Remark to add a remark for the picture.
View Device Information	Tap Device Info to view the device model and the device serial number.

4. Optional: If you have set contrast or remark in the previous step, save the settings.

- Tap **Save** → **Save as** to save it as a new picture.
- Tap **Save** → **Overwrite** to overwrite the original picture.

6.2 View Pictures and Videos on Device

You can view, filter, download, and delete the pictures and videos stored on the device SD card. This function is only supported by handheld thermal cameras.

Before You Start

Make sure the device has logged in to the Mobile Client.

Steps

1. Tap **On-Device Files** on the Home page.
2. Select a device.

On this page, you can also tap **Manual Login** to log in to the device manually. For details, refer to [**Manually Log in to Device**](#) .

3. Select the folder.

Pictures and videos in the folder will be displayed.




4. **Optional:** Select **All Types**, **Only Pictures** or **Only Videos** to filter files.

All pictures and videos, or only pictures/videos will be displayed.

5. **Optional:** Set the start time and the end time to view captured pictures and recorded videos of this time period.

6. **Optional:** Perform the following operations.




Download Pictures or Videos

- Tap a specific picture or video in its larger version and tap  . The picture or video will be downloaded from the device SD card to the local. Tap **Picture&Video** on the Home page to view the downloaded file.
- Tap  to select one or more pictures or videos, and tap  . The checked pictures and videos will be downloaded from the device SD card to the local. Tap **Picture&Video** on the Home page to view downloaded files.

Note

If **Save Pictures to Phone** has been enabled on the Settings page, the pictures will be downloaded to the phone's photo album at the same time.

Delete Pictures or Videos

- Tap a specific picture or video in its larger version and tap  . The picture or video stored on the device SD card will be deleted.
- Tap  to select one or more pictures or videos, and tap  . The selected pictures or videos stored on the device SD card will be deleted.



6.3 Switch Thermal/Optical View for Captured Picture

You can switch the image mode among thermal mode, optical mode, PIP mode, and combined mode for the captured picture.

Enter the Picture and Video Management page according to one of the following methods.

- On the home page of the Mobile Client, tap **Picture & Video**.
- In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.

Note



- After tapping the larger picture, you can tap  to edit the picture according to the following steps.
- You can tap  to return to the Live View page quickly.

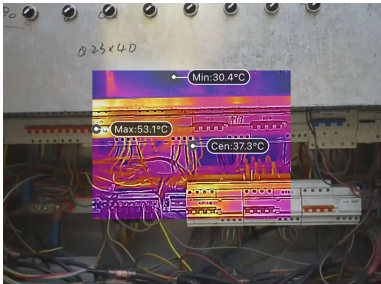


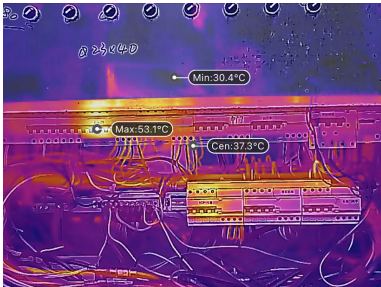

On the Picture and Video Management page, tap the following icons to switch the image mode.

Note

The icons displayed are dependent on the device capability.

Table 6-1 Image Mode Descriptions

Icon	Name	Description
	Thermal Mode	In thermal mode, the device displays thermal view.
	PIP Mode	In PIP (Picture in Picture) mode, the device displays thermal view inside optical view.

Icon	Name	Description
		 <p>Figure 6-1 PIP Mode</p>
	Optical Mode	In optical mode, the device displays optical view.
	Combined Mode	<p>In combined mode, the device displays the combined view of thermal channel and optical channel.</p>  <p>Figure 6-2 Combined Mode</p>
	Blending	Drag to the left and right to adjust the visible light ratio.

6.4 Set Thermometry Parameters for Captured Picture

Before temperature measurement on a captured picture, you should set thermometry parameters such as emissivity and environment temperature. Inappropriate thermometry parameters will affect the accuracy of temperature measurement.

Enter the Picture and Video Management page first according to one of the following methods.

- On the home page of the Mobile Client, tap **Picture & Video**.
- In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.



Note

- After tapping the larger picture, you can tap to edit the picture according to the following steps.
- You can tap to return to the Live View page quickly.

On the Picture and Video Management page, tap a picture and then tap → to set thermometry parameters. After setting the parameters, you can tap **Save** to overwrite the original picture or save the picture as a new picture.

Emissivity

Set the value to the emissivity of the target material. The default value is 0.97.



Note

The emissivity of the surface of a material is its effectiveness in emitting energy as thermal radiation. See **Common Material Emissivity Reference** for emissivity of common materials.

Distance

Set the straight-line distance (unit: m) between the to-be-measured object and the device. The default value is 2 m.

Background Temp

Set the average temperature (unit: ° C) of the environment where the device locates in.

6.5 Measure Spot's Temperature for Captured Picture

You can view the spot with the highest temperature, the spot with the lowest temperature, the center spot, as well as the temperature on any other spot on the captured picture.

Enter the Picture and Video Management page first according to one of the following methods.

- On the home page of the Mobile Client, tap **Picture & Video**.
- In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.



Note

- After tapping the larger picture, you can tap to edit the picture according to the following steps.
- You can tap to return to the Live View page quickly.

On the Picture and Video Management page, tap a picture, and then tap → to show the toolbar for measuring temperature.

Center Spot

Display the center spot of the picture and its temperature on the picture.

Hot Spot

Display the spot with the highest temperature on the picture and the spot's temperature.

Cold Spot

Display the spot with the lowest temperature on the picture and the spot's temperature.

Custom

Display a movable spot and its temperature on the picture. You can drag the spot and its temperature will change accordingly.



Note

You can customize up to 3 spots for temperature measurement.



Note

You can tap **Clear** to clear all the spots on the picture.

6.6 Measure Frame's Temperature for Captured Picture

You can set frames on the captured picture and the software can measure the highest temperature, lowest temperature, and average temperature in the frame.

Steps








Note

You can set up to 3 frames on the captured picture.

1. Enter the Picture and Video Management page.
 - On the home page of the Mobile Client, tap **Picture & Video**.
 - In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.



Note

- After tapping the larger picture, you can tap  to edit the picture according to the following steps.
 - You can tap  to return to the Live View page quickly.
-
2. On the Picture and Video Management page, tap a picture, and then tap  to enter the editing mode.
 3. Tap  →  on the toolbar to set a frame on the captured picture.
 4. **Optional:** Edit the frame.

Move Frame	Drag the frame to move it.
Delete Frame	Tap Delete above the frame to delete it.
Adjust Shape and Size	Drag a vertex of the frame to adjust the frame's shape and size. You can also spread fingers apart and pinch them together inside the frame to adjust its shape and size.

5. Tap areas outside of the frame on the picture to confirm the frame settings.

The the highest temperature, lowest temperature, and average temperature in the frame will be displayed. The blue point represents the spot with the lowest temperature, and the red point represents the spot with the highest temperature.

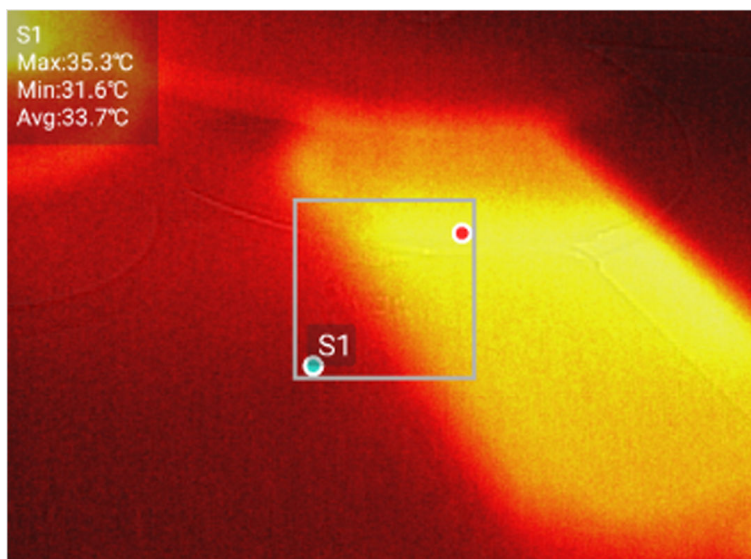


Figure 6-3 Frame's Temperature



6.7 Set Alarm Temperature for Captured Picture



Alarm temperatures are the threshold temperatures for highlighting the parts with temperature exceptions in a captured picture. The temperature exceptions occur when there are temperatures higher/lower than the threshold temperatures, or when there are temperatures within or beyond an temperature interval. The parts with temperature exceptions will be marked with different colors. The function can be used in various thermal analysis scenarios, such as detecting the ill livestock whose body temperature is abnormal during quarantine inspection.

Enter the Picture and Video Management page first according to one of the following methods.

- On the home page of the Mobile Client, tap **Picture & Video**.
- In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.

Note

- After tapping the larger picture, you can tap  to set the alarm temperature according to the following steps.
 - You can tap  to return to the Live View page quickly.
-

On the Picture and Video Management page, tap a picture and then tap  →  to set the alarm temperature. After setting the alarm temperature, you can tap **Save** to overwrite the original picture or save the picture as a new picture.

High

If the temperature of a part in the picture is higher than the configured one, the part will be displayed in red.

The settings can be used in scenarios such as determining if components running exceptions exist in power station.

Low

If the temperature of a part in the picture is lower than the configured one, the part will be displayed in blue.

The settings can be used in scenarios such as determining if components running exceptions exist in power station.

Interval

If the temperature of a part in the picture is within the configured interval, the part will be displayed in yellow. The settings can be used in scenarios such as detecting humans or other homeothermic animals at night.

Insulation

The part in the picture with a temperature higher than the configured maximum temperature will be displayed in purple; Lower than the configured minimum temperature will be green. Within the configured temperature interval will be black.

The settings can be used in scenarios such as detecting livestock with abnormal body temperature during quarantine inspection.

6.8 Set Palettes for Captured Picture



The palette is the color scheme used to display a thermal image. You can select different palettes modes, such as White Hot and Ironbow, for the captured picture.


Enter the Picture and Video Management page first according to one of the following methods.


- On the home page of the Mobile Client, tap **Picture & Video**.
- In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.



Note

- After tapping the larger picture, you can tap  to edit the picture according to the following steps.
- You can tap  to return to the Live View page quickly.

On the Picture and Video Management page, tap a picture, and then tap  to enter the editing mode.

You can tap  and then select the palette mode. After setting palette mode, you can tap **Save** to overwrite the original picture or save the picture as a new picture.

White Hot

The hot part is light-colored in view.

Black Hot

The hot part is black-colored in view.

Rainbow

The target displays multiple colors, it's suitable for scene without obvious temperature difference.

Ironbow

If the color is close to yellow, the temperature is high. If the color is close to purple, the temperature is low. In this mode, the target object's outline is clear and the hotspot is easy to find. This mode is usually applied to the power industry.

Red Hot

The hot part is red-colored in view.

Fusion

The hot part is yellow-colored and the cold part is purple-colored in view.

Rain

The hot part in the image are colored, and the else is blue.

Ice Fire

The hot part is eye-catching red-colored in view, and the cold part is eye-catching blue-colored in view.

Green Hot

The hot part is green-colored.

Color

Colors are opposites in the color wheel with less contrast.

Sepia

The hot part is yellow-colored and the cold part is brown-colored.

Dark Blue

The cold part is blue-colored, the warm part is green-colored, and the hot part is white-colored.

Blue Red

The hot part in the image is red-colored, and the else is blue.

6.9 Generate Report

You can analyze captured pictures and generate a report. In the report, you can view the visual image and the thermal image of a scene, thermometry parameters (e.g., emissivity and distance). You can also edit the report, save it to your phone, or share it to others.



Steps


Note

- This function does not support analyzing videos.
 - The JPEG images downloaded from the device cannot be analyzed.
-

1. Enter the Picture and Video Management page.
 - On the home page of the Mobile Client, tap **Picture & Video**.
 - In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.
-


Note

- After tapping the thumbnail of the captured picture, you can skip step 2 and step 3 and tap  to generate a report for the current picture according to the rest of steps.
 - You can tap  to return to the Live View page quickly.
-

2. Tap  to select pictures for analysis.
-


Note

Up to 16 pictures can be analyzed at a time.

3. Tap .
 4. Enter the name and the description for the report, and tap **Confirm** to generate the report.
 5. **Optional:** On the Edit Report page, you can enter remarks on each page of the report.
 6. Tap **Complete** to preview the report in PDF format.
-

Note

Editing the report is not supported during the preview.

7. Tap  to share the report to others or save it to the phone.
-


6.10 View Videos


You can view the recorded video files and capture pictures.

Steps

1. Enter the Picture and Video Management page.
 - On the home page of the Mobile Client, tap **Picture & Video**.
 - In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.

Note

- You can also view the latest recorded video by tapping the thumbnail.
- You can tap  to return to the Live View page quickly.

2. Tap a video file and tap  to play the video file.

3. **Optional:** Tap  to pause.



6.11 Share Pictures and Videos




You can share the captured pictures and recorded (or clipped) video files to other applications such as Message and Twitter.

Steps

1. Enter the Picture and Video Management page.
 - On the home page of the Mobile Client, tap **Picture & Video**.
 - In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.

Note

- After tapping the larger picture, you can tap  to share the picture or the video to others.
- You can tap  to return to the Live View page quickly.

2. Share a specific picture or video, or share the pictures and video files in a batch.
 - Tap a specific picture or video and tap , and then select an application to share it to the selected application.
 - Tap  and select pictures or video files, and then tap  and select an application to share the pictures or video files to the selected application.



6.12 Delete Pictures and Videos


You can delete the pictures you captured or the videos you recorded.



Steps

1. Enter the Picture and Video Management page.
 - On the home page of the Mobile Client, tap **Picture & Video**.
 - In the lower-left corner of the Live View page, tap the thumbnail of the captured picture or recorded video, tap the larger picture or the video again, and tap **Enter Picture & Video**.

Note

- After tapping the larger picture, you can tap  to delete the picture.
- You can tap  to return to the Live View page quickly.

2. Delete pictures and videos.
 - Select a specific picture or video and tap  to delete the picture or video.

- Tap  and select pictures or videos, and then tap  to delete the selected pictures and videos.

Chapter 7 Local Settings

You can configure local settings for the Mobile Client, including auto login settings, sending feedback, checking and updating software version, etc.

Tap **Settings** on the Home page. You can configure or view the following parameters.

Privacy

You can manage system permissions for the app, and view Personal Information Collection List, List of Information Shared with Third Party, personal information, Privacy Policy, and so on.

- The system permissions include the permission of the camera, storage, and microphone..
- You can cancel privacy policy authorization. After cancellation, you will be not able to access full service.
- You can also search for and export personal information.

General

Save Pictures to Phone

- After it is enabled, for handheld thermal cameras, when you download on-device pictures or capture pictures with your device, they will be downloaded to the phone's photo album at the same time.
- After it is enabled, for smartphone thermal cameras, when you capture pictures with your device, they will be downloaded to the phone's photo album at the same time.

Clear Cache

Clear the caches (including the downloaded device upgrade package) of the Mobile Client.

Support

FAQ

You can view FAQs when needed.

Contact Us

You can view after-sales contacts and fill in the consultation form to consult us.

Feedback

- Tap **Email Us** to send us an email about any comments and suggestions for improving the Mobile Client. We are constantly working on ensuring the usability of the Mobile Client.
- Tap **Contact Us on Facebook** to log in to Facebook and send us any comments and suggestions for improving this Mobile Client. We are constantly working on ensuring the usability of the Mobile Client.

Online Service

You can inquire about products displayed on our official website, or give us feedback if you find out any problems with devices.

Help

View the user manual of the app.

About

View and update software version, and view the Privacy Policy, Open Source License, and Software License Agreement.



Note

When there's a new version available, a red dot will appear on **About**, you can tap **About → Update Software Version** and then tap **Download** on the pop-up window to download the upgrade package and update the software version.

Appendix A. Common Material Emissivity Reference

The following table shows the emissivity value of some common materials.

Table A-1 Common Material Emissivity

Material	Emissivity
Human Skin	0.98
PCB	0.91
Cement Concrete	0.95
Ceramics	0.92
Rubber	0.95
Paint	0.93
Wood	0.85
Asphalt	0.96
Brick	0.95
Sand	0.9
Soil	0.92
Cotton	0.98
Cardboard	0.9
White Paper	0.9
Water	0.96



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