

# ***VOLTCRAFT***®

© App Instruction Manual

**Voltcraft WBS-220**

Item no. 2104425



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# Introduction

The thermal imaging camera, in combination with a smartphone with an Android-based operating system, allows image viewing and the analysis and processing of radiometric thermal imaging data recorded with the thermal imaging camera WBS-220.

To connect the camera, a USB-C port must be available. Likewise, the smartphone must support the USB OTG (On-The-Go) standard. The USB OTG standard allows certain devices to be connected and operated directly with the smartphone.

The camera is powered directly from the smartphone and does not require its own power supply.

To operate the thermal imaging camera, a free app is available for download in the Google Play App Store. When installing the app, fees may be incurred for the data connection or transmission. Please note the terms and conditions of your telephone service provider.

This Quick Start Guide serves to explain the software installation, screen elements and handling.

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# General Information

## Important Information

Pay special attention to information in a blue-coloured frame.

The blue frame provides tips on product use and features.

# Legal Notice

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# Requirements

## Network Connection

- Smartphone with USB-C port and USB OTG standard
- Operating system: Android 5.0 or later

# Installation

## Installing the app

Before reinstalling apps, make sure that your smartphone software is always up-to-date.

Open the Google Play App Store on your smartphone. If necessary, log in with your personal credentials to the Play Store.

Enter the name of the required app in the top search bar. The name is “Voltcraft Smart Thermal”. Start the search by pressing the button with the magnifying glass icon (in the keypad). The “Voltcraft Smart Thermal” app should appear first on top. If this is not the case, please check your search term for possible spelling errors.

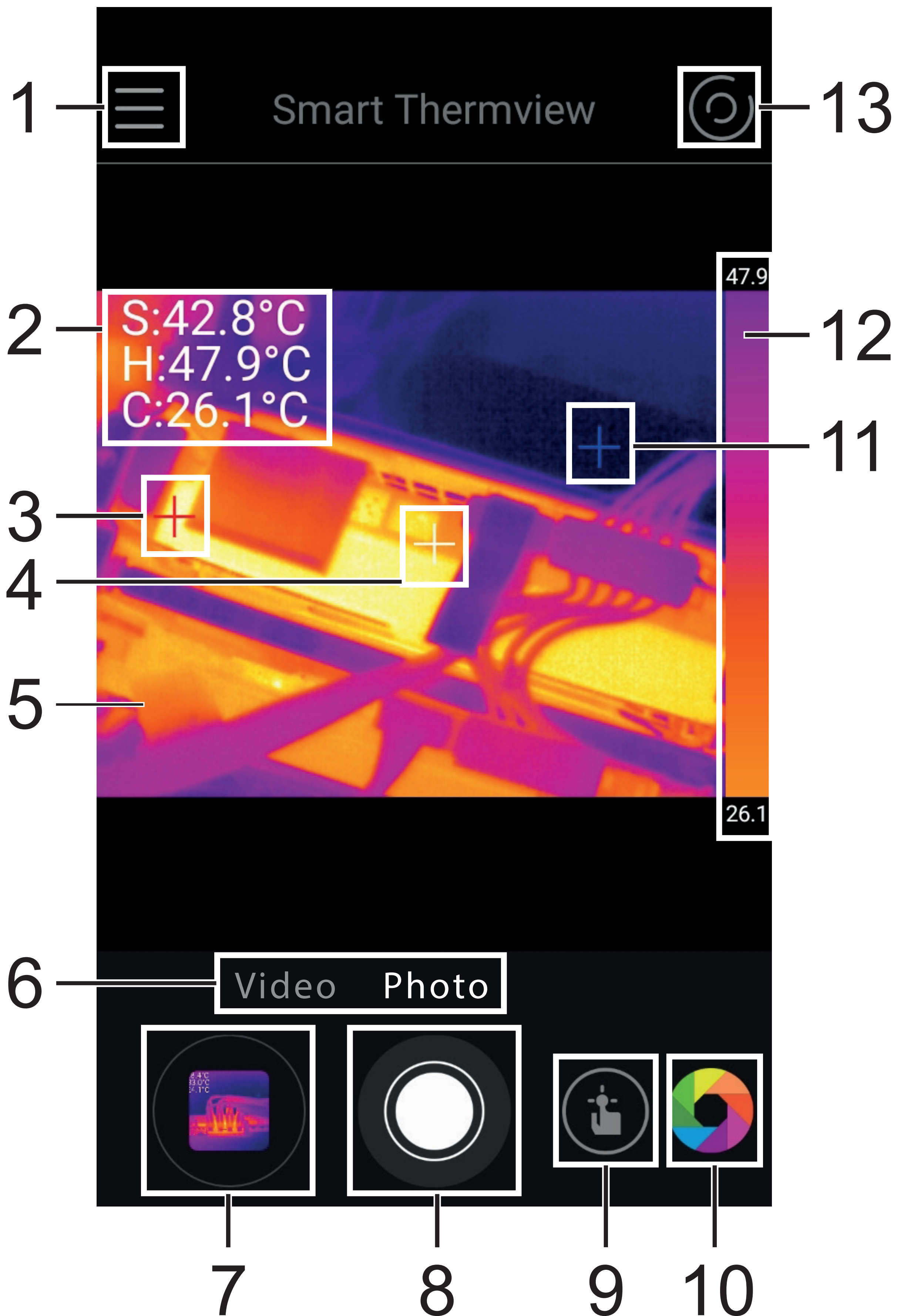
Select the app and press the “Install” button. The app will be installed on your smartphone.

After successful installation, the app can be started via the “Open” button.

Make sure your mobile device satisfies the minimum requirements as outlined on the app store download page.

# Operation

The operation of the app is self-explanatory and menu-driven. The following sketch shows an overview of the control panels.



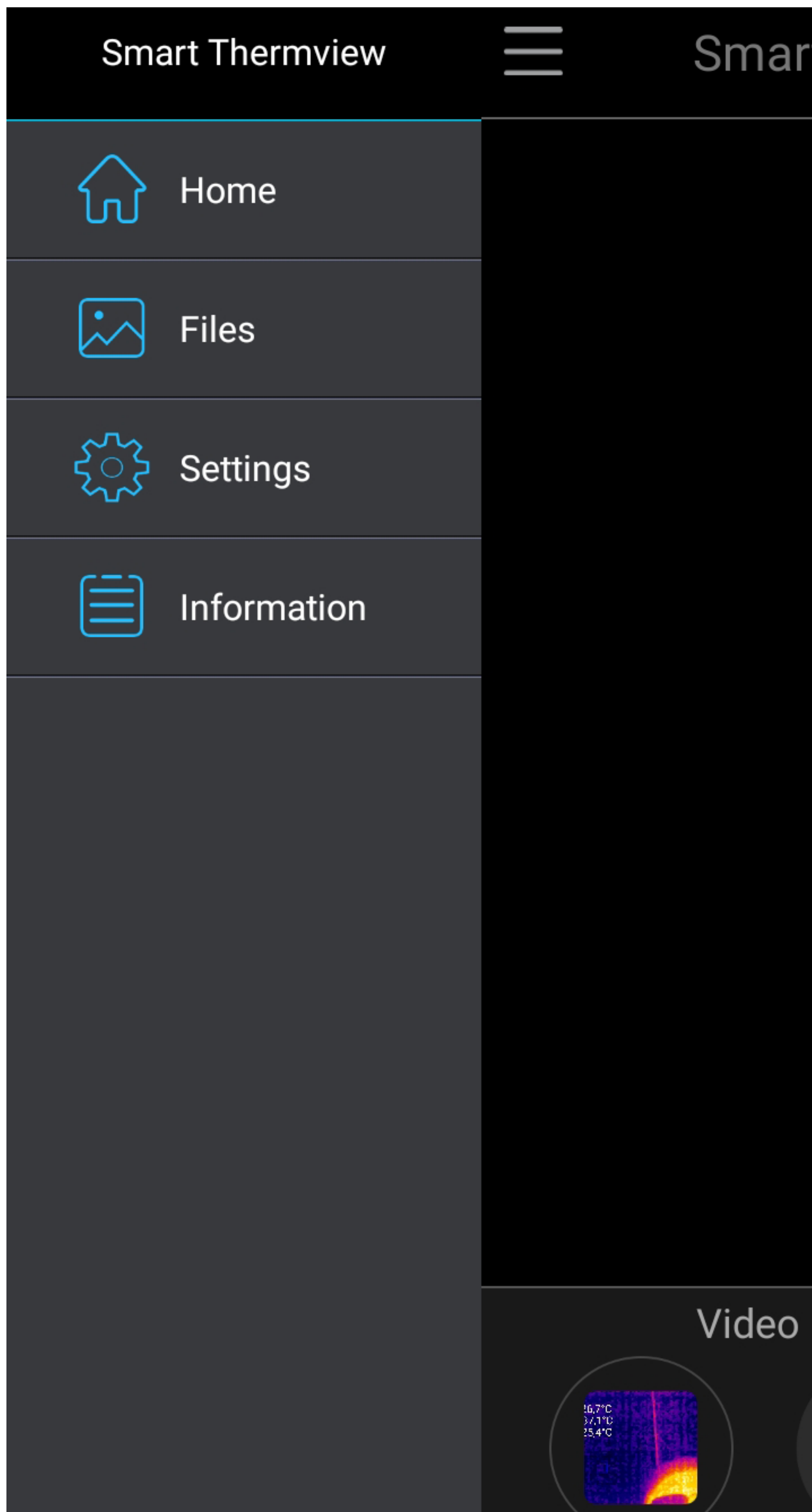


1. System menu
2. Temperature display for markers  
S = Spot (centre point)  
H = Hot (warmest point)  
C = Cold (coldest point)
3. Red marker for warmest point
4. White marker for centre point
5. Infrared image
6. Recording mode  
Photo = Single shot  
Video = Video recording
7. Image menu
8. Shutter button for image or video recording
9. Measurement menu
10. Menu for colour palettes
11. Blue marker for coldest point
12. Temperature range with colour scale
13. Marker menu

# Explanation of the functions

The program interface is divided into different submenu areas.

## System menu (1)



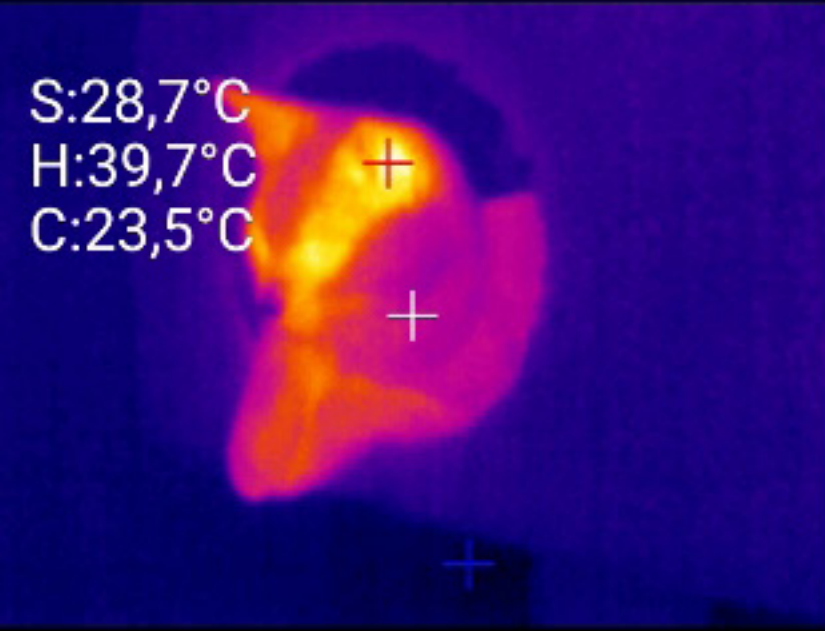
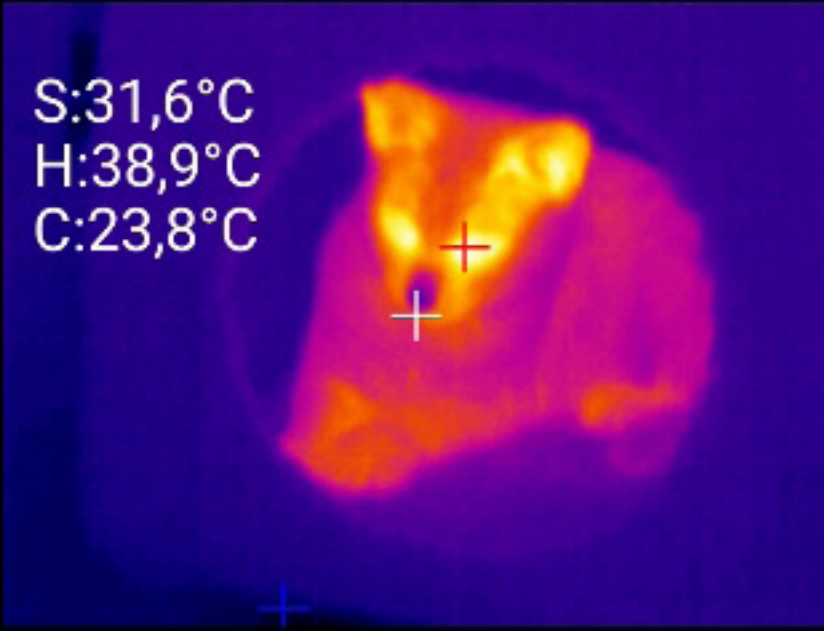
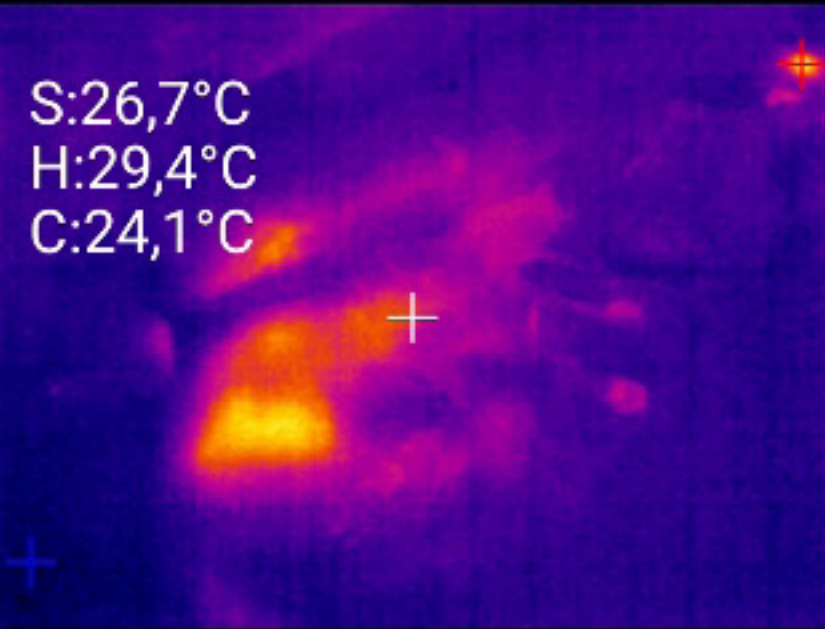
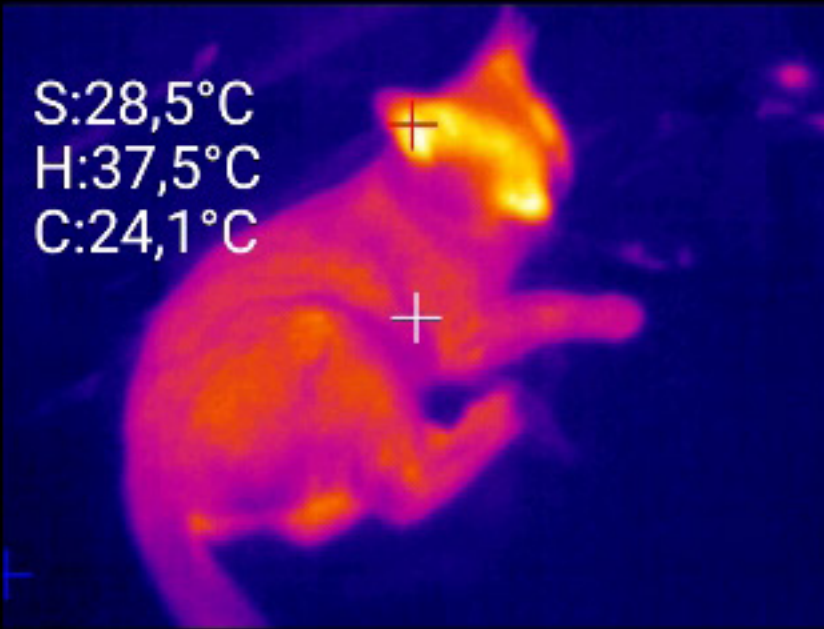
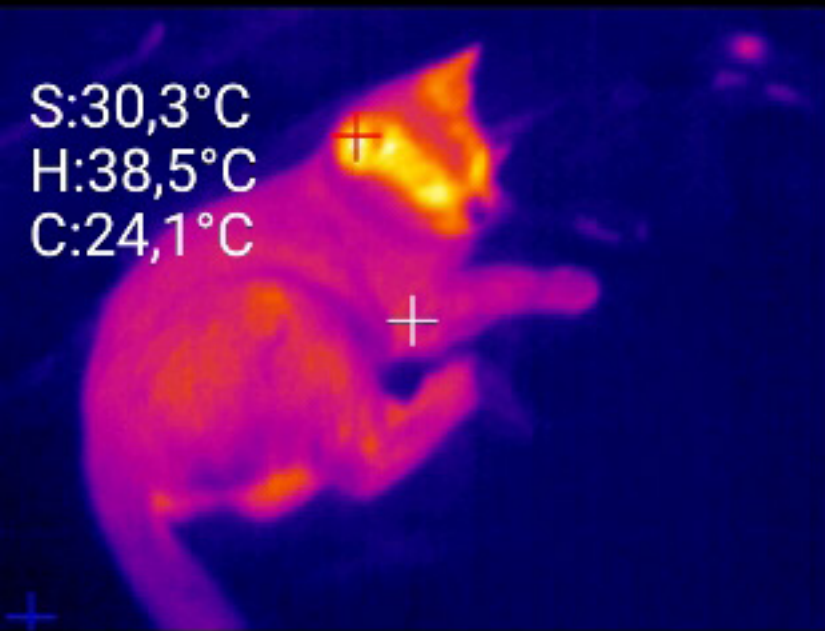
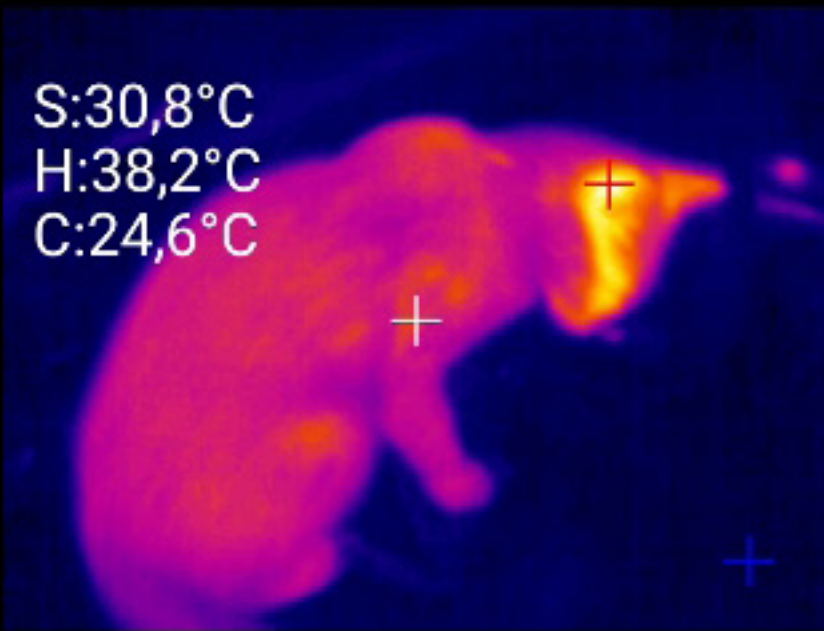
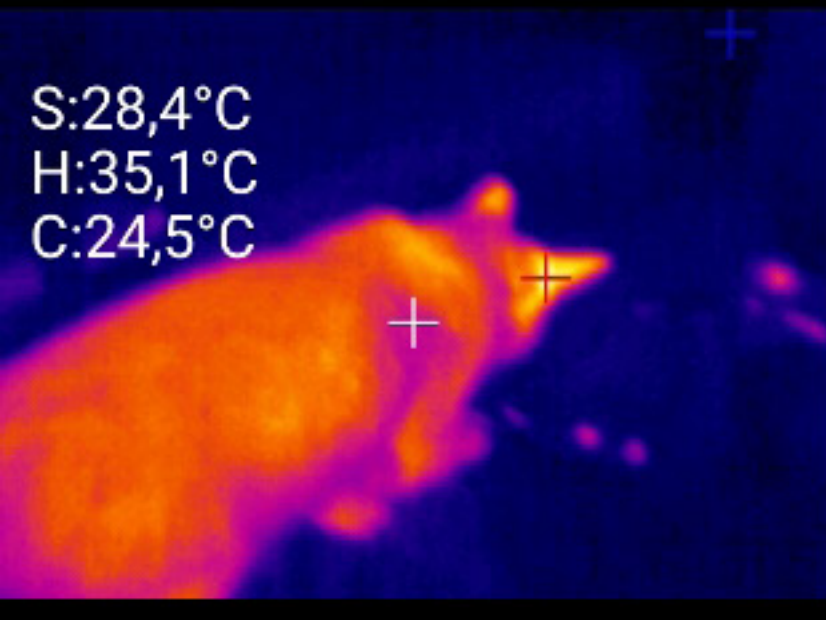
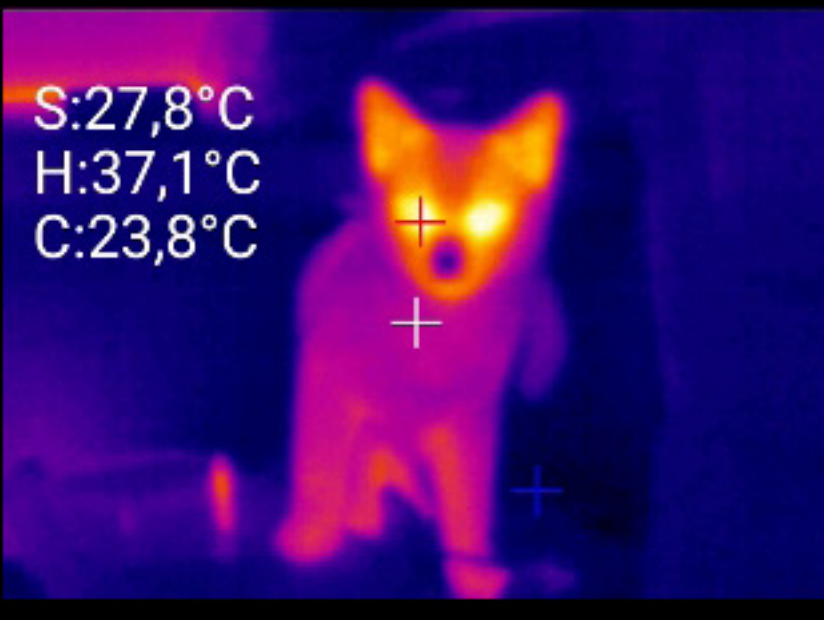
# Home

Returns to the main display

## Files

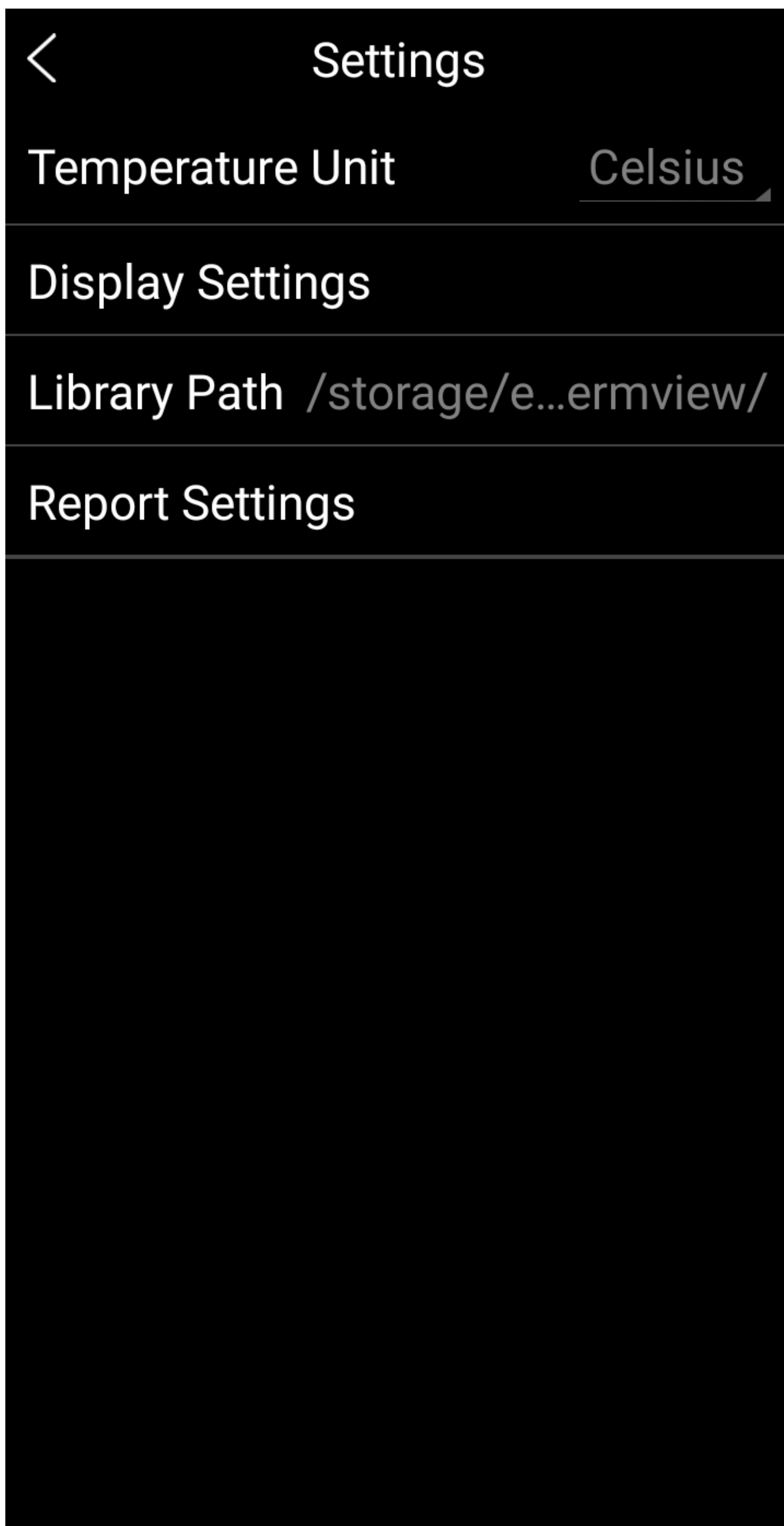
File list for photos and videos

< File List

 <p>S:28,7°C H:39,7°C C:23,5°C</p>	 <p>S:31,6°C H:38,9°C C:23,8°C</p>
20191019162506.jpg	20191019162405.jpg
 <p>S:26,7°C H:29,4°C C:24,1°C</p>	 <p>S:28,5°C H:37,5°C C:24,1°C</p>
20191019162336.jpg	20191019162329.jpg
 <p>S:30,3°C H:38,5°C C:24,1°C</p>	 <p>S:30,8°C H:38,2°C C:24,6°C</p>
20191019162325.jpg	20191019162248.jpg
 <p>S:28,4°C H:35,1°C C:24,5°C</p>	 <p>S:27,8°C H:37,1°C C:23,8°C</p>

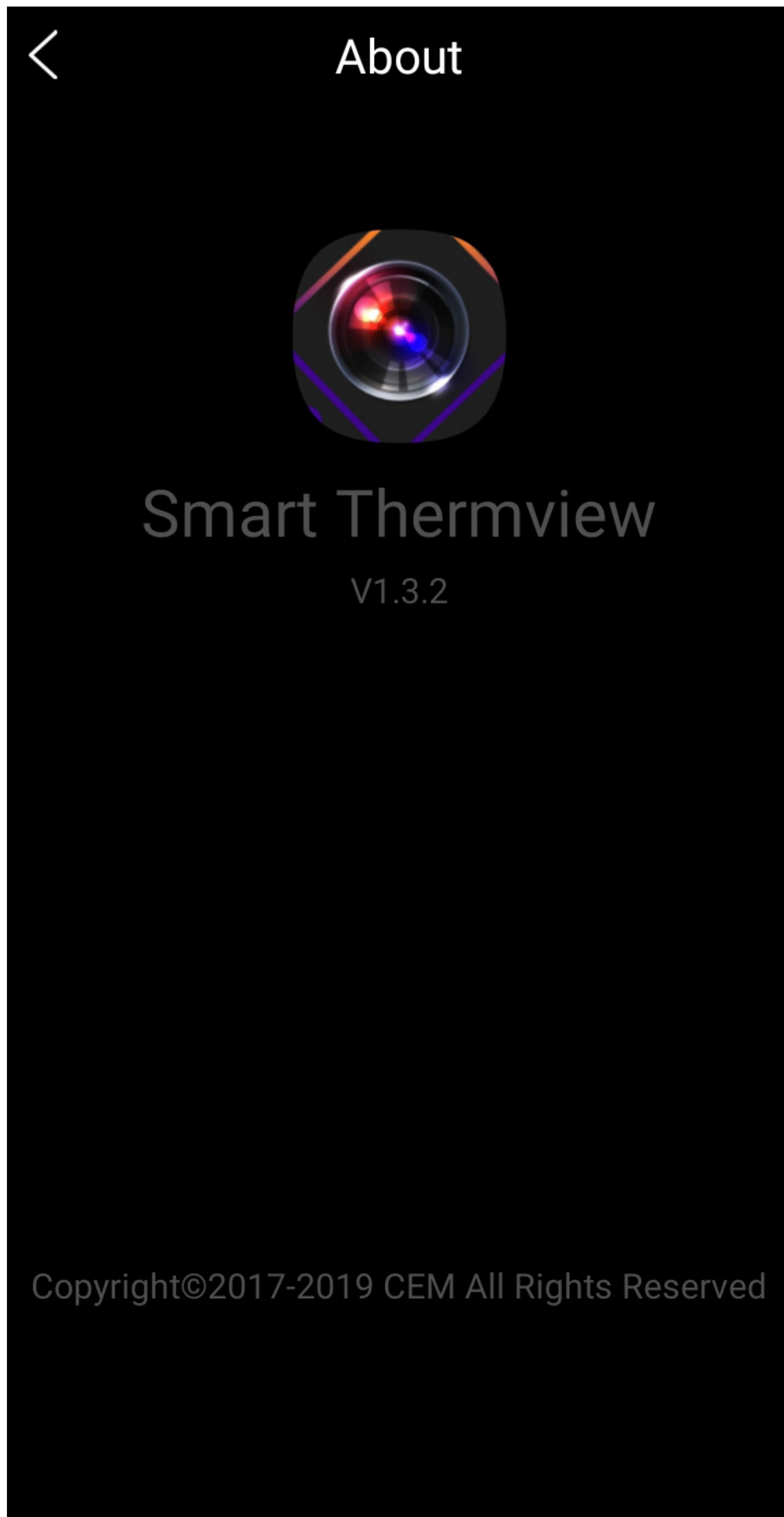
# Settings

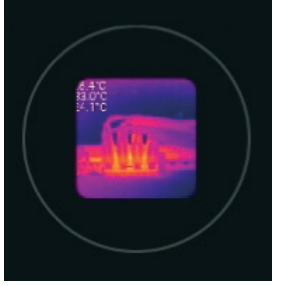
Basic setting of the temperature unit, display settings, storage path and report information.



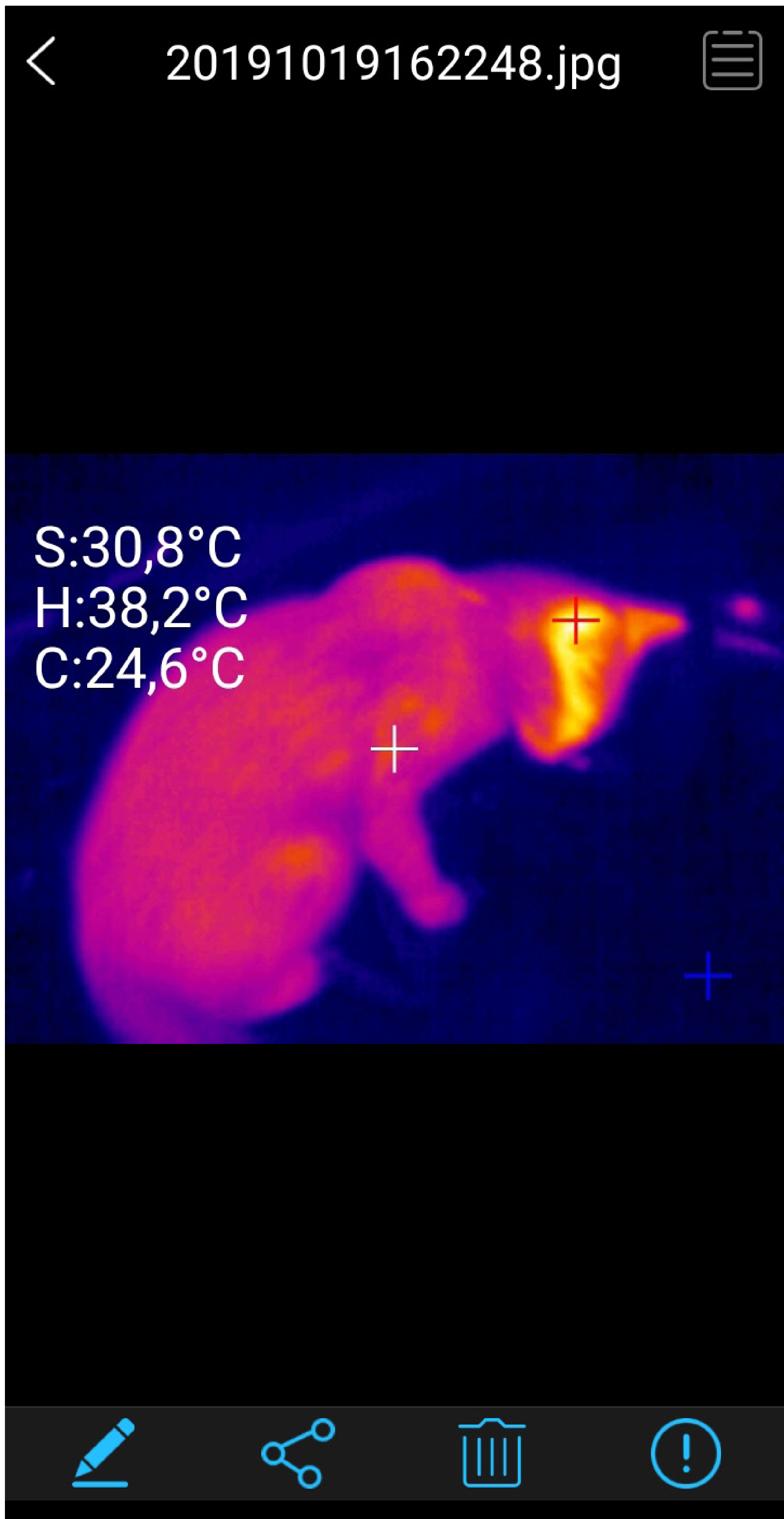
# Information

Version display



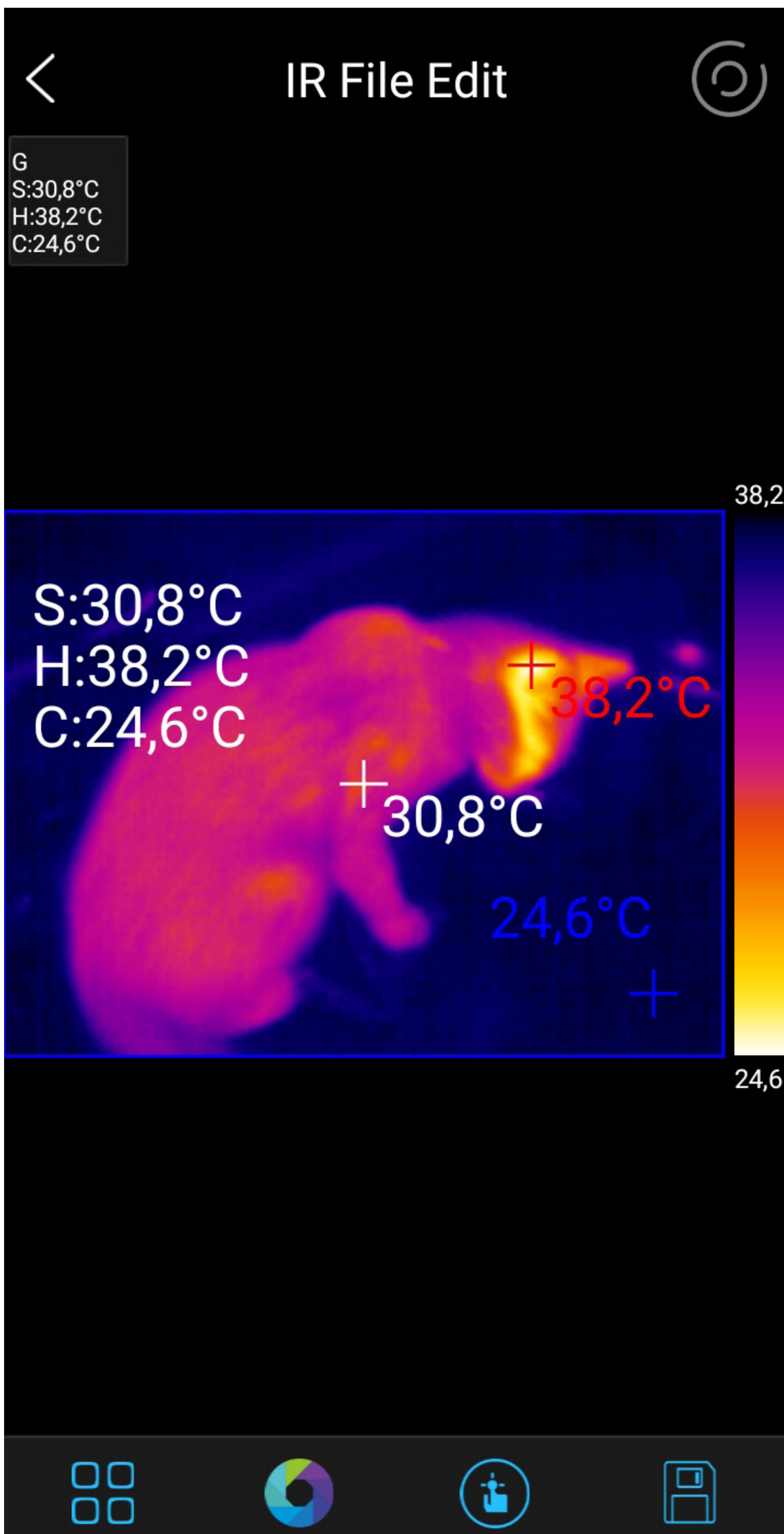


# Image menu (7)



# Pencil icon

The images can be edited. It is possible to subsequently change the colour palette or insert additional measuring markers. There is also a memory function for the edited images.



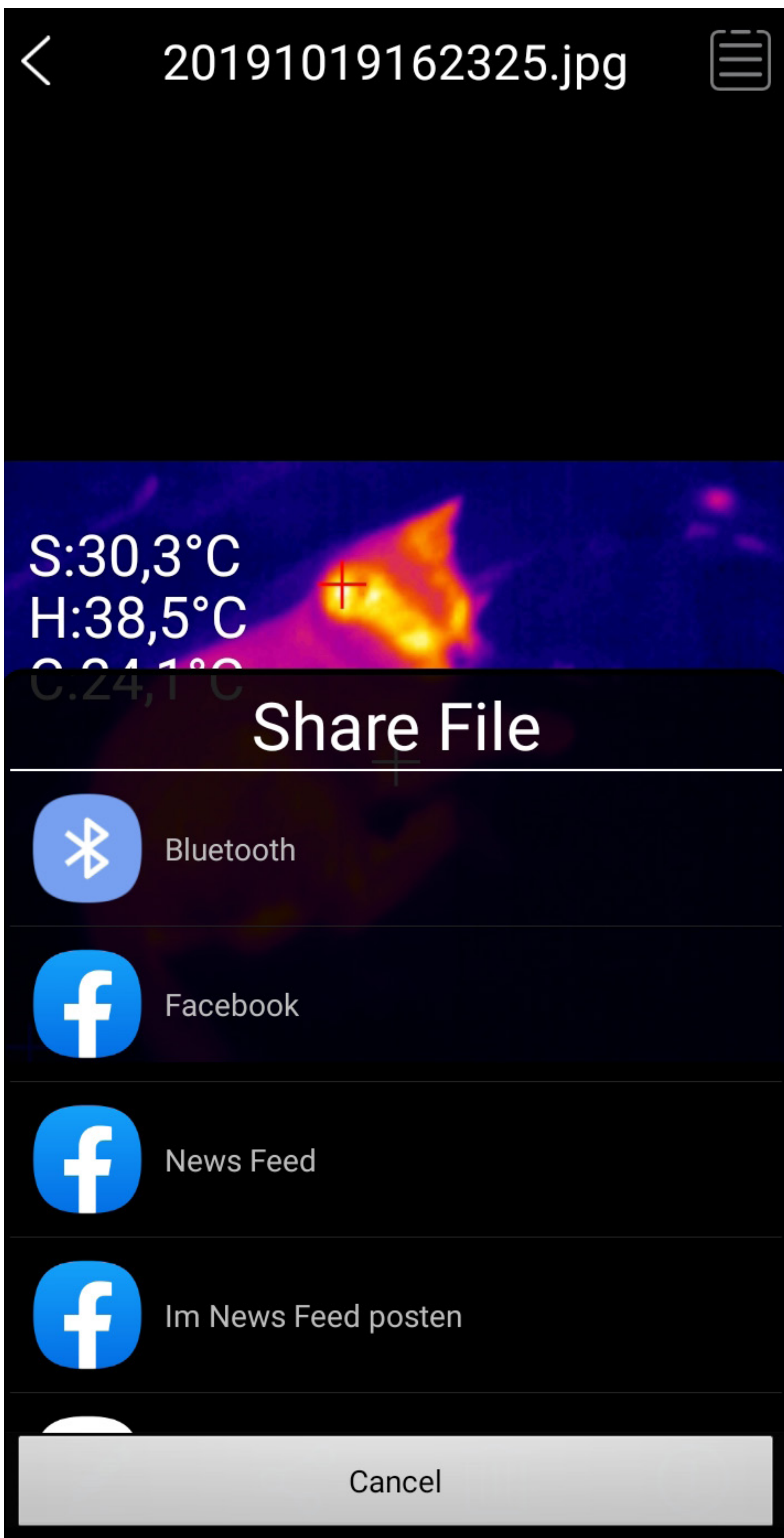
## Radiometric data

The thermal imaging camera saves the corresponding radiometric temperature value for each pixel. This allows the later accurate analysis of the image data.



## Network icon

Here, the recorded data can be shared via common social media channels or sent by e-mail. Likewise, a pdf export in the internal memory is possible.



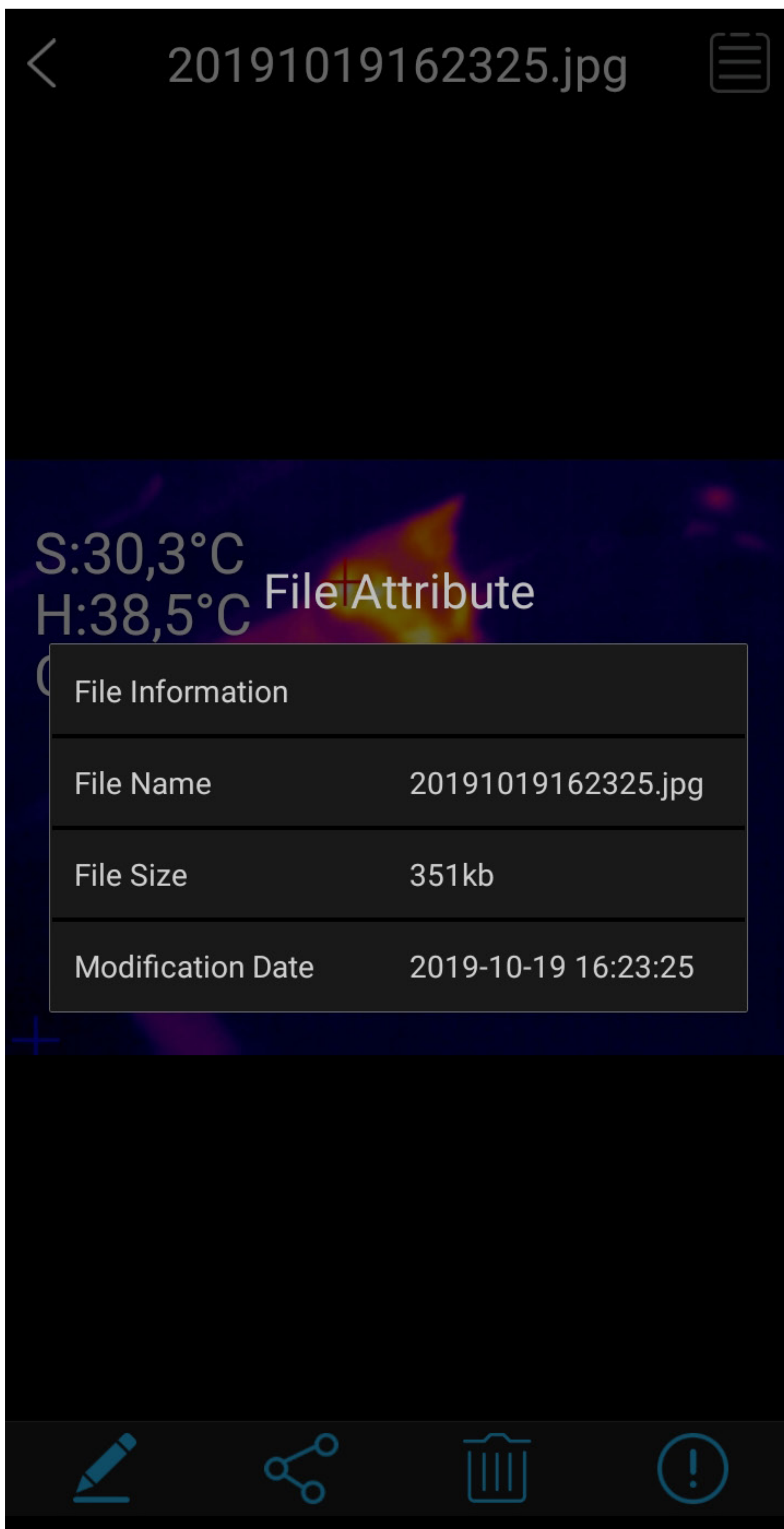
# Bin symbol

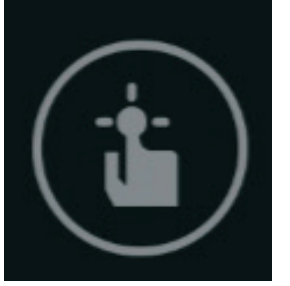
The current image can be deleted if necessary.  
YES = delete, NO = don't delete.



# Information symbol

File information can be displayed (name, file size, image date).





# Measurement menu (9)

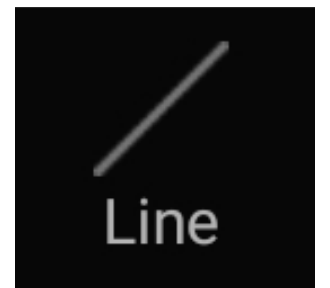
The screenshot displays the 'Smart Thermview' application interface. At the top, there is a navigation bar with a hamburger menu icon on the left, the text 'Smart Thermview' in the center, and a circular refresh icon on the right. Below the navigation bar is a large thermal image. The image shows a color gradient from blue (cooler) to red (warmer). On the left side of the image, there is a white text overlay displaying measurement data: 'S:37,1°C', 'H:41,9°C', and 'C:27,5°C'. A white crosshair is positioned in the center of the image. On the right side, there is a vertical color scale bar with numerical values '41,9' at the top and '27,5' at the bottom. A blue crosshair is located at the bottom right of the image. Below the thermal image is a toolbar with three measurement tools: 'Point' (represented by a square with a crosshair), 'Line' (represented by a diagonal line), and 'Area' (represented by a square with diagonal hatching). Below the measurement tools are two tabs: 'Video' and 'Photo'. Under the 'Video' tab is a circular icon containing a small thermal image with three temperature readings: '16,7°C', '37,1°C', and '25,4°C'. Under the 'Photo' tab is a large white circle with a black border. To the right of the 'Photo' tab are two more icons: a hand holding a device (the same as the top-right icon) and a colorful camera shutter icon.

## Point



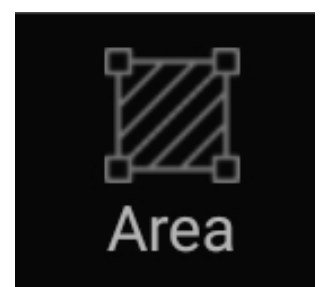
A single measurement point can be freely set in the image.

## Line



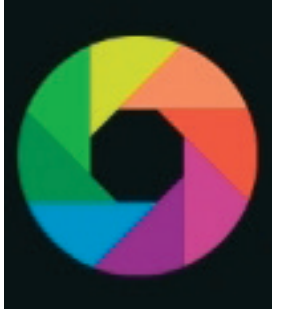
A line can be drawn in the image. Along this line, the coldest and warmest temperature points are displayed.

## Area



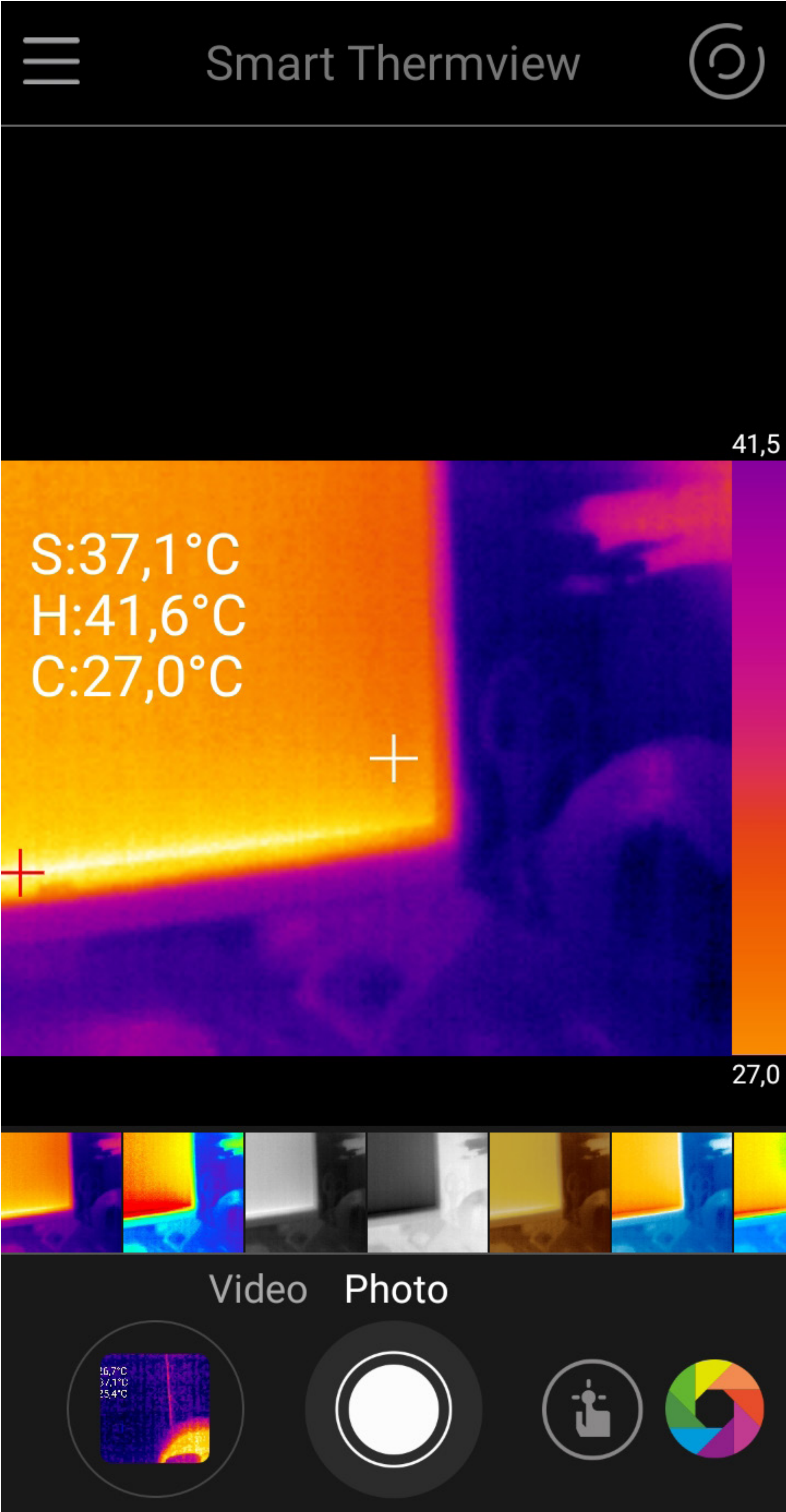
An area can be marked in the image. Within this area, the coldest and warmest temperature points are displayed.

Alarm settings for Hi / Lo alarms can be set by clicking on the set measurement points in the image. The markers can also be deleted individually (Delete).



# Menu for colour palettes (10)

Here you can set 9 different colour palettes for displaying the thermal images.



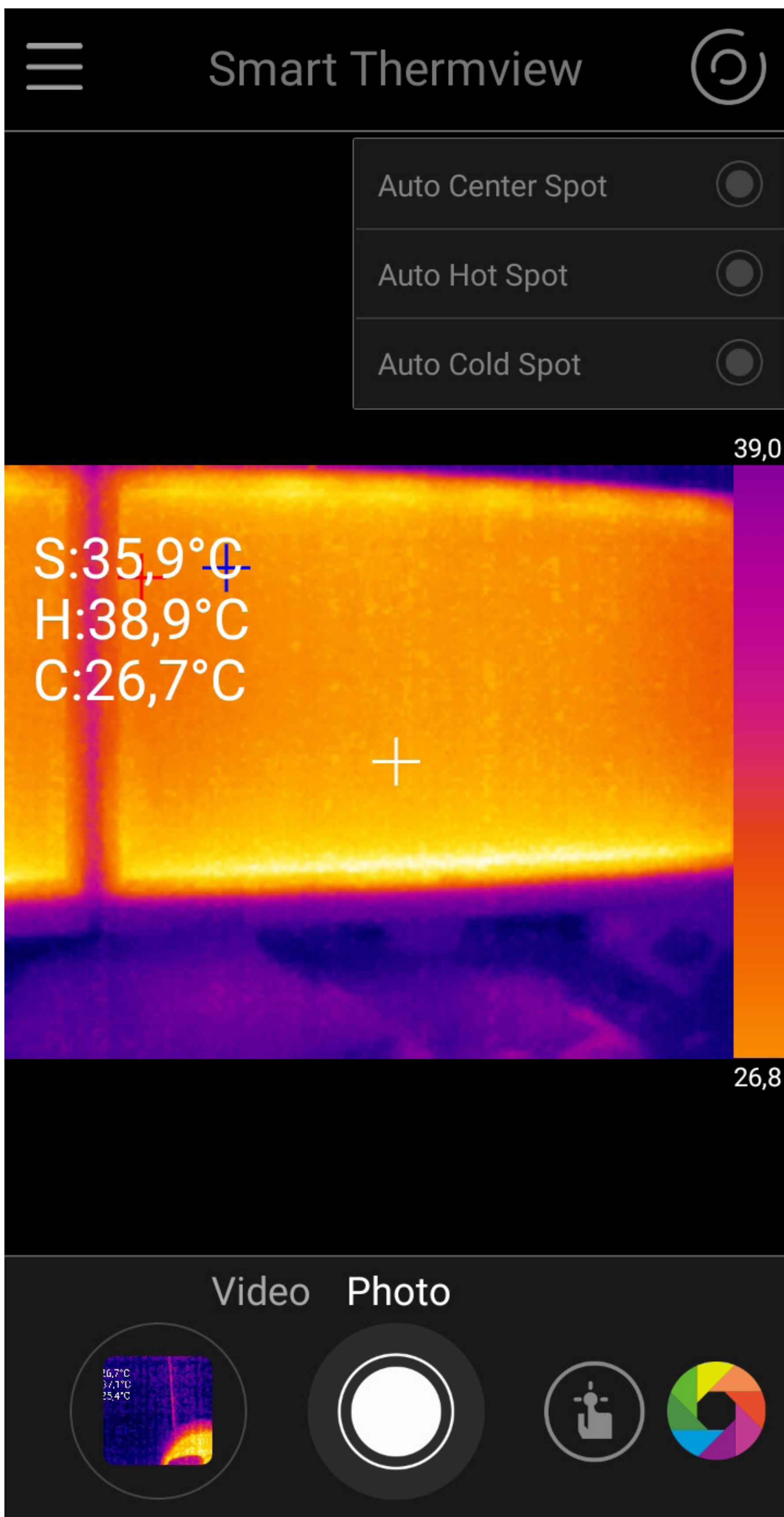


# Marker menu (13)

**Auto Center Spot** = Marker for centre of image

**Auto Hot Spot** = Automatic marker shows the warmest measuring point

**Auto Cold Spot** = Automatic marker shows the coldest measuring point



# Retrieve thermal images on your smartphone

Thermal images and videos can be accessed within the app.

You can also access the video and image data from the standard "Gallery" app. The memory directory can be set in the "Smart Thermview" app.

## Exiting the thermal imaging app

To exit the app, click on the home button on your smartphone. Carefully remove the camera from your smartphone and store it in the supplied pouch.