greenteg

CALERA®

User Manual

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Hardware Overview

Technical Specifications & Features

What's in the Box

Your Calera package includes everything needed to start measuring core body temperature (**Picture 1**) :

- **Calera Device**
- **6x white liner patches**
- **Securing clips**
- **Magnetic USB Charging Cable**
- **Bluetooth Dongle** - For PC/Mac connectivity

1. What's in the box

Device Specifications

Physical Design

- **Dimensions**: 50mm × 40mm × 8.5mm
- **Weight**: Only 17 grams
- **Material**: Durable, skin-compatible polymer
- **Water Rating**: Waterproof up to 5 feet
- **Design**: Fully sealed with no moving parts

Performance Features

- **Battery Life**: 6.5 days continuous operation
- **Data Storage**: 6.5 days of high-resolution data
- **Sampling Rate**: 1Hz for logging mode and 1 minute for measuring mode
- **Skin Temperature Accuracy**: ±0.1°C
- **Core Temperature Accuracy**: ±0.21°C

2. Top view of Calera Device (LED Indicator)

Device Components

LED Status Indicator (**Picture 2**)

Location: top left corner

When shaking the device firmly for 2 seconds

- **Flashing green**: Device is on and connected
- **No Light**: Device off or battery depleted

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Charging Contacts (**Picture 3**)

Location: Top of Device

- **Magnetic connection** for secure charging
- **Waterproof design** when not charging
- **2-hour charge time** for full battery

⚠️ To reset the device, brush the charging cable over the sensor area.
This action will stop all active logging mode measurements. Use caution when charging.

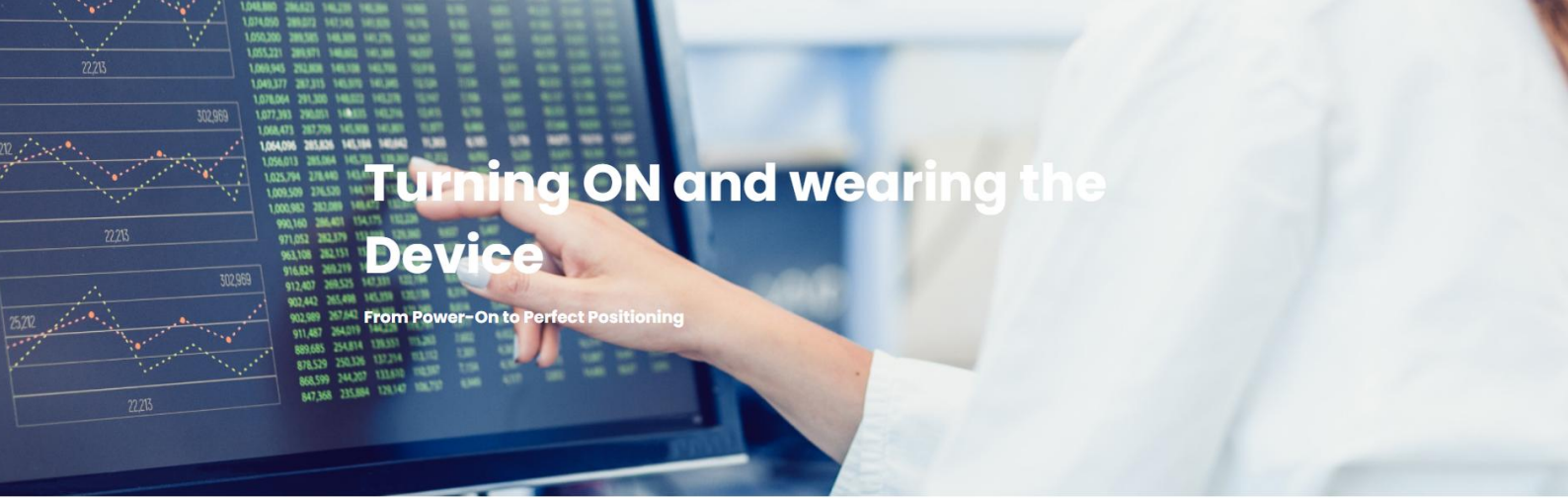
Sensor Area (**Picture 4**)

Location: Bottom surface (skin contact)

- **Unique device ID -** Six-segment identifier displayed as X#:X#:X#:X#:X#:X#
- **Heat flux sensor** - Measures thermal energy transfer
- **Temperature sensor** - Measures skin temperature

3. Charging Contacts

4. Sensor Area



Turning ON and wearing the Device

From Power-On to Perfect Positioning

How to Turn ON Your Calera

Your Calera device uses motion activation for reliable startup:

💡 Prior to initial startup, make sure to charge the device for 2 hours

1. Shake the device for 2-3 seconds
2. Watch for LED confirmation - Green light flashing indicates successful activation
3. The device is now ready for connection and measurement

❗ Important Notes

Battery check -If the LED does not light up, the battery is low—please charge the device before use.

Calera is attached to the chest with a patch

Wearing the Device for Optimal Results

Recommended position: Chest, apical area

- Highest accuracy for core body temperature measurements
- Algorithm optimization designed specifically for chest placement
- Clinical validation performed with chest positioning

Alternative Placement Options

- Upper arm - Acceptable accuracy with slight reduction
- Stomach or back - Possible, but contact the Calera team first
- Other locations - Always consult with Calera research support

Calera attached to chest with chest strap

Attachment Methods

Medical-Grade Adhesive Patches

Blue Liner Patches - Best for Sensitive skin applications

Sports Patches, white liner - Best for high-intensity activities and sports studies

Chest Strap Integration

Compatible with the included Calera **chest strap** or any standard heart rate monitor strap. The device clips securely into the strap's integrated mounting system. We recommend using the securing clips to ensure the device stays on the strap.

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App and Software Download

Complete Research Dashboard for Advanced Core Body Temperature Monitoring

Download the Calera App

Scan the QR code to download the Calera App on Google Play or the App Store.

Which one should you use?

Use Mobile App If You:

- Want simple, everyday monitoring
- Conduct remote, long-term studies
- Prefer smartphone integration
- Need basic data export
- Want portability and convenience

Use the Research Tool If You:

- Are conducting lab studies
- Need to manage multiple devices
- Require high-resolution 1Hz data, including accelerometer
- Want faster, more stable downloads

Accessing the cloud dashboard

If you need access to this feature, please email info@caleraresearch.com with your use case and the email address you use to sign in.

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Measuring Mode with App

Perfect for everyday monitoring or remote, long-term studies

What it is

Standard continuous monitoring mode that automatically starts when you turn on your device. Data is synced via the Calera mobile app and can be downloaded from your Cloud account.

How it works

- Recording starts automatically when the device is powered on and placed on the skin
- Stored data syncs automatically when the app is open, the device is within Bluetooth range, and the phone or tablet is connected to the internet. We recommend syncing at least once per day.
- When synced, data is uploaded to the Calera cloud, where you can always download it

Data specifications

- Resolution: 1-minute intervals
- Storage: Automatic cloud backup
- Duration: Runs continuously until the battery is depleted
- Data streams: Core temperature, skin temperature, heart rate (if paired)

Logging Mode with App

High-resolution data collection on the go

What it is

Advanced recording mode that captures high-resolution data directly on the device for later download and analysis.

How it works

- Manually start/stop recording sessions through the app
- All raw data is saved locally on the device during measurement
- High-resolution 1Hz sampling for detailed analysis
- Requires an internet connection to access logging features

Data specifications

- Resolution: 1-second intervals (1Hz)
- Storage: Local device storage (6.5 days capacity)
- Duration: Manual start/stop control
- Data streams: Core temperature, skin temperature and accelerometer (x,y,z)

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Logging Mode with Research Tool

Professional multi-device management for research environments

What it is

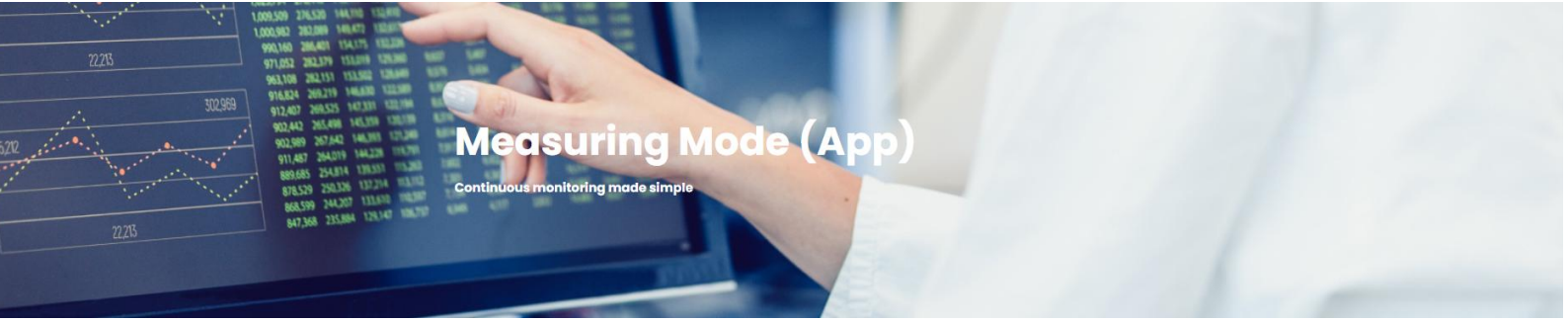
Desktop software solution for researchers who need to control multiple devices simultaneously with enhanced stability and speed.

How it works

- PC/Mac software with dedicated Bluetooth dongle
- Control multiple devices from single interface
- Batch operations and device grouping
- Faster downloads and more stable connections

Data specifications

- Resolution: 1-second intervals (1Hz)
- Storage: Local device storage with PC backup. The same data is also uploaded to your cloud account.
- Duration: Logging mode runs until the device's storage is full. With a full charge, the device records continuously for up to 6.5 days.
- Data streams: Core temperature, skin temperature, heart rate (when paired), heat flux (if license agreement) and accelerometer (x,y,z)



Measuring Mode (App)

Continuous monitoring made simple

Overview

The Calera app is ideal for everyday monitoring or remote, long-term studies. When possible, we recommend using the Research tool on your PC for a more stable connection. The app connects to one device at a time; to log data from multiple devices simultaneously, use the Research tool software.

Key Features

- High-Resolution Data: 1-minute resolution recording
- Mobile Control: start and stop measurements conveniently from your mobile device

⚠️ Haven't downloaded the app or created an account yet? Get started here

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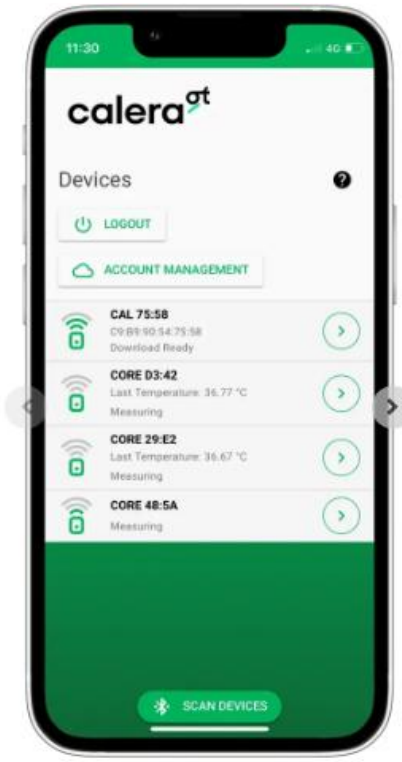
Setting Up the Measurment

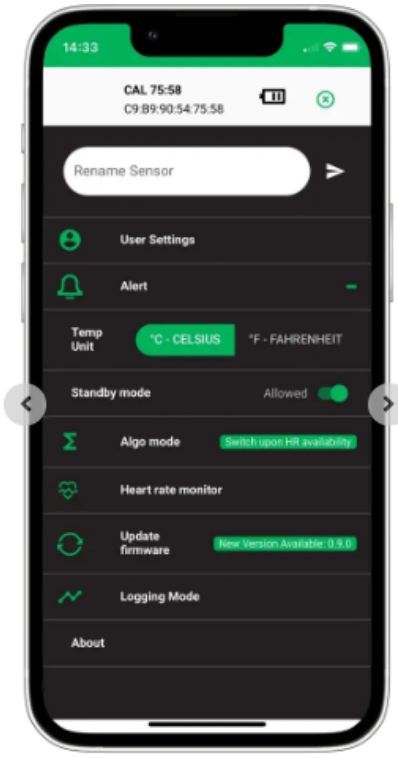
- Ensure your Calera® device is fully charged and linked to your account.
- Open the Calera® app.
- Shake the device to power it on (look for the green flashing LED).
- Select your device in the app with the corresponding ID. (**Picture 1**)
- In Settings, verify your temperature alerts, temperature unit, and algorithm mode. (**Picture 2**)
- Under User settings, you can input the subject's unique parameters. (**Picture 3**)
- Attach the device to your body using the patch or strap. The device will automatically begin measuring and recording data once it detects contact with the skin.
- Allow a 20-minute calibration period before relying on data accuracy.
- To avoid data loss, sync your device with the app at least once per day. Ensure your device is connected to your smartphone via Bluetooth, and your phone has an active internet connection.
- Once you open the app and log in, data syncs automatically and is securely stored in the cloud. (**Picture 4**)
- Synced data is archived as historical data, accessible and downloadable at any time

⚠️ **Important:**

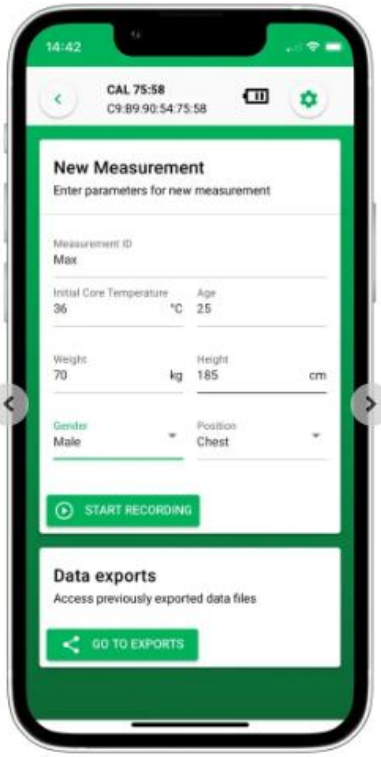
- Data is transmitted to the app and cloud during the syncing process. After syncing, local device storage is cleared.
- An internet connection is required to sync with the cloud.
- Measurements are logged at 1-minute intervals.
- Participants should sync data at least once daily to prevent data overwriting.



1 Scan & Select your device



2 Verify your settings



3 Enter subject information

4 Core body temperature and skin temperature monitoring in real time

Logging Mode (Software)

High-resolution data collection for research applications

Overview

Logging mode delivers high-resolution data recording directly on your device, capturing measurements at a 1 Hz frequency for advanced research applications. Unlike measuring mode, logging mode is managed through Calera® software.

Key Features

- High-resolution data capture at 1 Hz sampling rate
- Simultaneous management of multiple devices
- Reliable direct control via Bluetooth dongle for PC/Mac
- Accelerated data downloads with dedicated software
- Optimized for research workflows and professional environments

⚠ Haven't downloaded the software or created an account yet? Get started here

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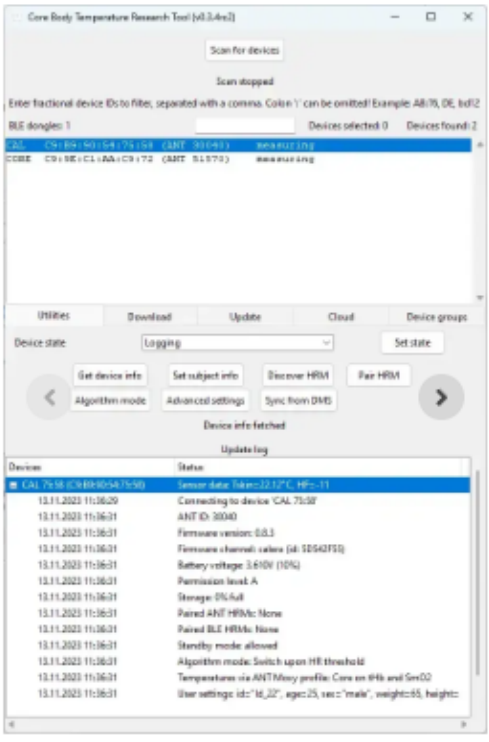
Setting Up the Measurement

- Ensure the BLE dongle is connected to your PC and the devices are fully charged.
- Launch the Research Tool software. (**Picture 1**)
- Shake the devices until the green light flashes.
- Scan for available devices and select your preferred device.
- Verify the device is running the latest firmware and the correct algorithm.
- Switch the device to "logging" mode (**Picture 2**)
    - Selecting your device
    - Select "logging"
    - Click on "Set State"
    - Scan and verify the updated state
- Attach the device to the subject
- Allow 20 minutes for calibration to ensure accurate measurements.
- After the measurement, switch the device to "Download Ready". (**Picture 3**)
    - Selecting your device
    - Select "Download Ready"
    - Click on "Set State"
    - Scan and verify the updated state
- Navigate to the "Download" tab to retrieve the data. (**Picture 4**)
- Once the download completes, the device will automatically revert to measuring mode.



1 Scan & Select your device

⚠ **Important:**

- Make sure the devices are set to the desired State before recording and downloading the data.
- Measurements are logged at 1 second intervals and accelerometer data is included.

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In-Depth Look at the App

Guide to Research-Grade Temperature Monitoring on the go

Overview

The Calera Research app lets you control and monitor your calera device for research. It supports real-time data viewing, configurable alerts, easy data export, and connects with heart rate monitors.

Key Features

- **Device Control:** Supports connection to a single device at a time
- **Data Download:** Retrieve your data through the cloud
- **Connection Stability:** Requires a daily WiFi connection for reliable data retrieval
- **Portability:** Accessible on any mobile device
- **Live Monitoring:** Provides real-time data visualization

⚠️ Haven't downloaded the app or created an account yet? Get started here

Interface Overview

- **Device Connection & Set-Up:** View real-time status for all connected devices
- **Main Dashboard Navigation:** Manage core measurements and device settings
- **Settings:** Oversee firmware updates and device maintenance

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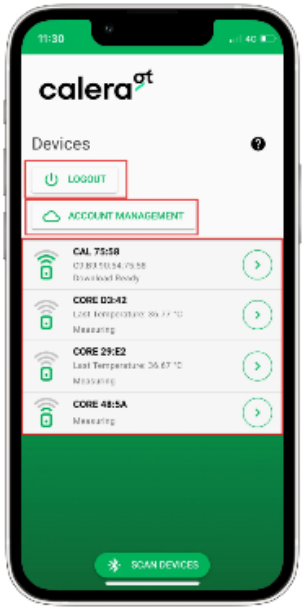
Device Connection & Set-Up



The app automatically scans for nearby devices. You can stop or restart scanning at any time by pressing the green "SCAN DEVICES" button. It will show the devices that are in Bluetooth range.

The center panel displays all detected devices: "CAL" indicates Calera devices, and "CORE" indicates CORE devices, each with a unique ID.

To log out, use the logout option in the app. For account deletion, select account management to visit the webpage and remove your Calera cloud account.

⚠️ When adding a device for the first time, you'll be prompted to link it to your account. Once added or if you select a device you already own, you'll be directed to the Overview page.

Functionality

Main Dashboard

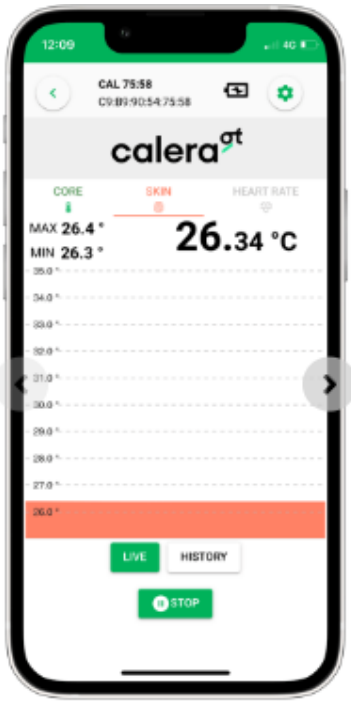
The dashboard displays real-time data from your device in an easy-to-read graph. Use the buttons above the graph to switch between core temperature, skin temperature, and heart rate views. (**Picture 1**)

- At the top, you'll see your device's nickname, ID, and battery status.
- Click the Settings icon in the top right to adjust device settings or start a new measurement.
- At the bottom, toggle between "Live" for real-time data and "History" for previous recordings.

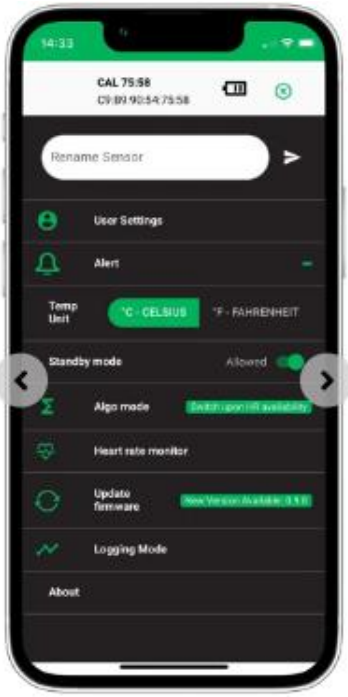
Settings

You will find :

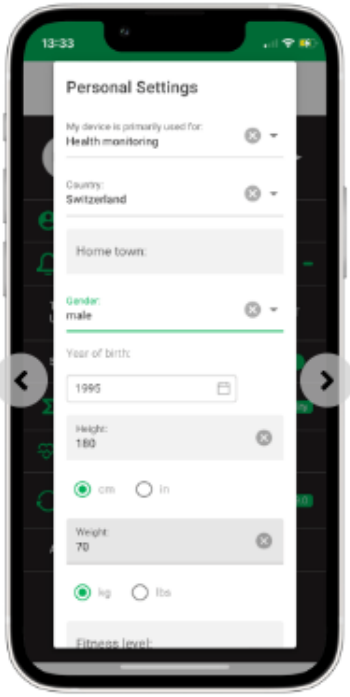
- At the very top a textbox that will change the sensor name. (**Picture 2**)
- User Settings: Here you can save the personal settings, which can be used to identify the individual who is wearing the device. (**Picture 3**)
- Alert: Enable an alert for when certain temperature values are reached or exceeded (**Picture 4**)
- A switch option to change the temperature units from Celsius to Fahrenheit
- Standby mode switch which can be used to help save a device's battery :
    - If allowed, the sensor automatically stops measuring when no skin contact is detected after about 10 minutes
    - If not allowed, the sensor continuously measures
- Algo mode: This option allows you to choose between the different algorithm modes. (**Picture 5**)
    - To correctly choose an algorithm, please get in touch with us (info@caleraresarch.com). As the chosen algorithm determines the accuracy of the CBT values, it's crucial to select the correct one based on your use case.
- Heart rate monitor: This menu will help you select and pair/unpair a heart rate monitor from your device. You will need first to scan for the nearby monitors before pairing one. (**Picture 6**)
- Update firmware: With this menu, you will be able to download the latest version of firmware and its algorithm.
- About: Here you can find multiple information about your CALERA device, mainly: (**Picture 7**)
    - The CALERA app version
    - The CALERA device's firmware version
    - The CALERA device's BLE address (MAC address)
    - The CALERA device's ANT id
    - The CALERA device's battery level



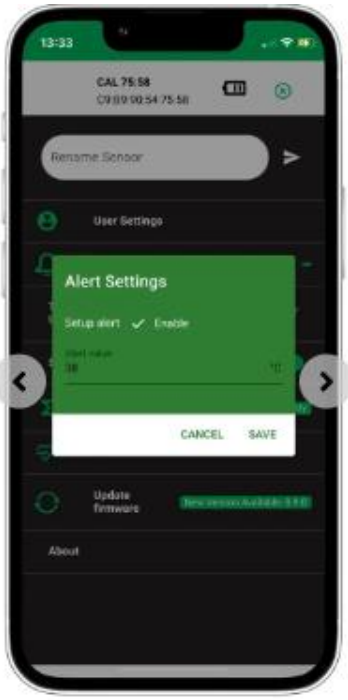
1 Main Dashboard



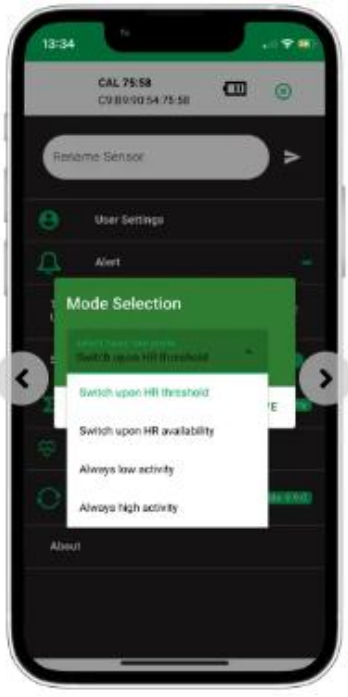
2 Settings Page



3 User Settings



4 Alerts



5 Algorithm Mode

Overview

The Calera research software is a tool to conveniently and reliably collect high-resolution core body temperature data. Whether you're conducting clinical studies, sports performance research, or need precise temperature monitoring, our software solutions offer the control and capabilities required for professional use.

Key Features

- Devices Management
- Data Collection and Export
- User settings and metadata management
- Heart Rate Monitor pairing

⚠️ Haven't downloaded the software or created an account yet? Get started here

Interface Overview

- **Device Overview:** View real-time status for all connected devices
- **Utilities Tab:** Manage measurements and device settings
- **Download Tab:** Retrieve and export collected data
- **Update Tab:** Oversee firmware updates and device maintenance
- **Cloud Tab:** Access cloud storage directly
- **Device Groups**: Organize devices for multi-device research projects

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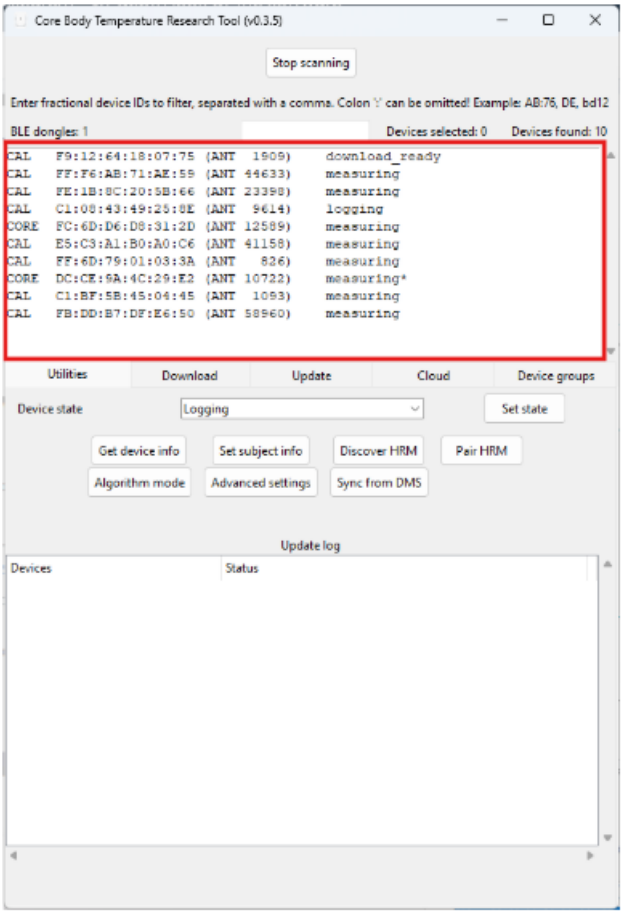
Device Overview



When launched, the tool automatically scans for all devices within the BLE dongle's range.

- Detected devices appear in the main window. Calera® research devices are labeled as "CAL" and CORE devices as "CORE."
- The top section displays all devices in range, including their status and unique Bluetooth and ANT+ IDs.
- The bottom section provides a log of each device's activity.

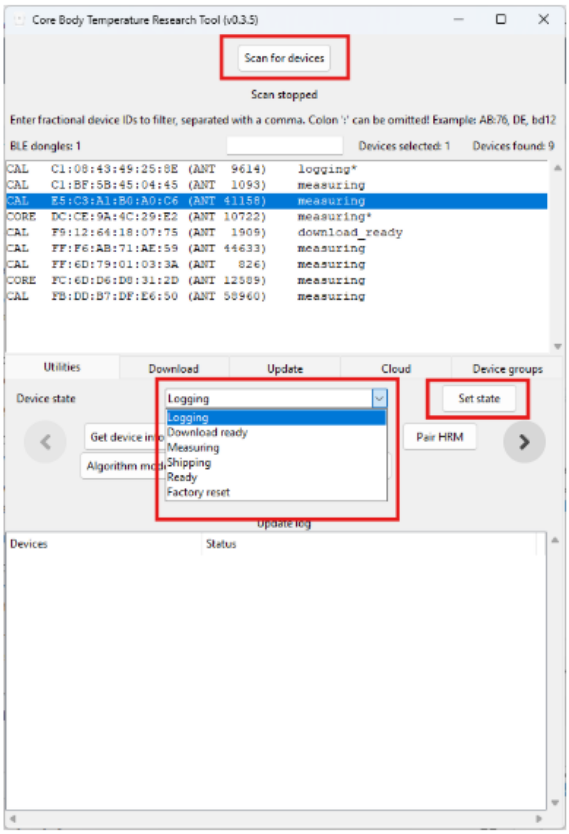
Utilities

Set State

Set the Device State (Picture 1)
Calera® devices operate in several states. The current state is displayed in the Device Overview window at the top.
To update the state, select your desired mode and click "Set State":

- **Logging**: Enables "logging" mode to capture raw data at a 1 Hz frequency.
- **Measuring**: Standard state of the device. Note that data collected in measuring mode cannot be exported from the PC tool. You should use logging mode for this.
- **Download Ready**: Ends logging and prepares the device for data download. After download, the device automatically returns to "measuring" mode.
- **Ready**: Do not use
- **Shipping**: Do not use unless storing the device for long periods. This puts the device into hibernation. The device can only be reactivated by charging (not shaking).
- **Factory Reset**: Avoid using as this will erase all data and settings on the sensor.

After changing the device state, always click "Scan devices" to refresh the device list and confirm the new status.



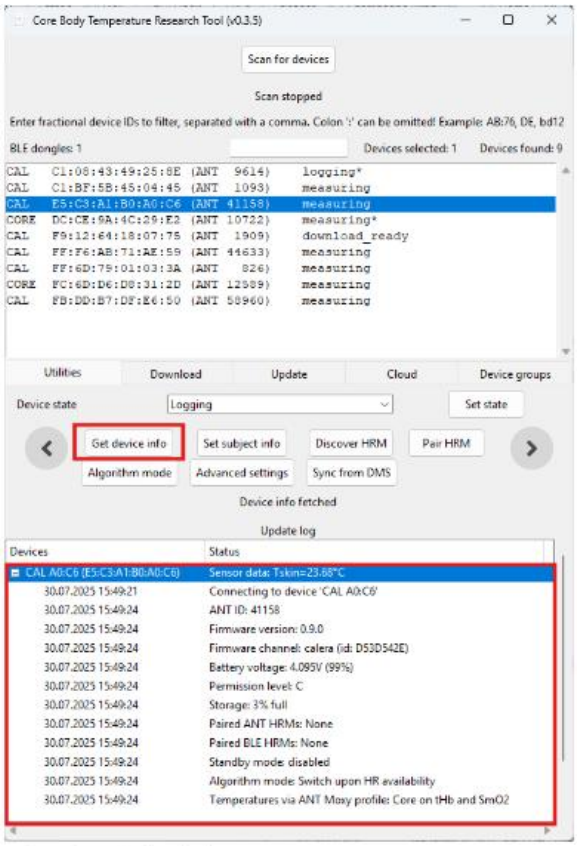
1 Set device state

Get Device Info

Select a device, then click "Get device info" and expand the entry using the plus (+) sign in the Update log at the bottom. (**Picture 2**)

You will see:

- Current readings for Tskin, Tcore, HR (when paired) and heat-flux (encrypted)
- ANT+ ID number
- Firmware version
- Precise battery status
- Permission level
- Storage details
- Algorithm mode
- Additional device settings
- Subject information: ID, age, weight, height, gender, and device position



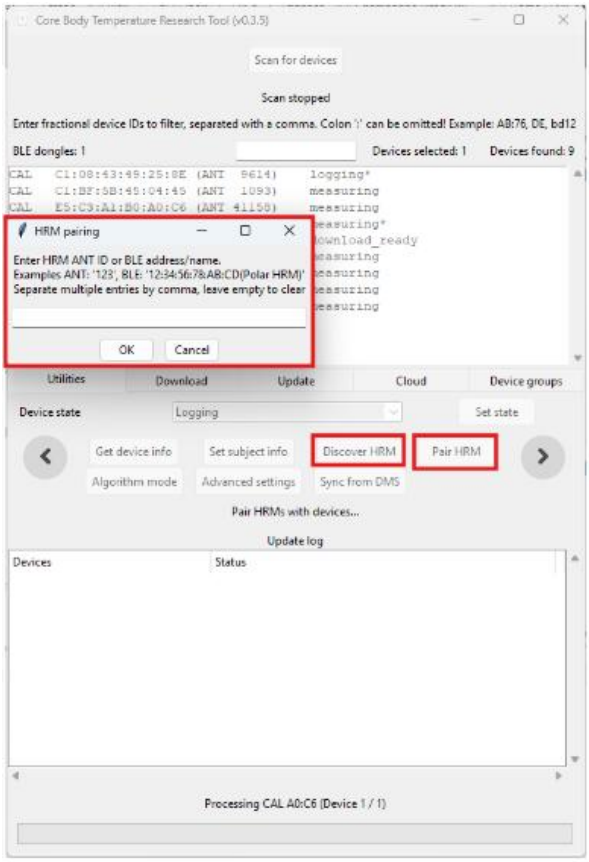
2 Getting device info

Discover HRM & Pair HRM

To Pair an HRM to your Calera device do the following (**Picture 4**)

- Select your device, click "Discover HRM," and wait for the scan to complete (indicated by the green bar at the bottom, about 10 seconds).
- The ANT+ and Bluetooth IDs of detected HRMs will appear.
- Note the ANT+ or BLE ID, as this information will disappear when you leave the page.
- Then click the "Pair HRM" and enter its ANT+ ID or BLE address/name (example: ANT+ "64001").
- Avoid pairing multiple HRMs with a single Calera device.
- Each HRM only needs to be paired once with each device. The pairing will be retained for future use.

⚠ Calera® supports most ANT+ and BLE heart rate monitors. You can choose between the ANT+ and BLE channel.



4 Discovering and pairing HRM

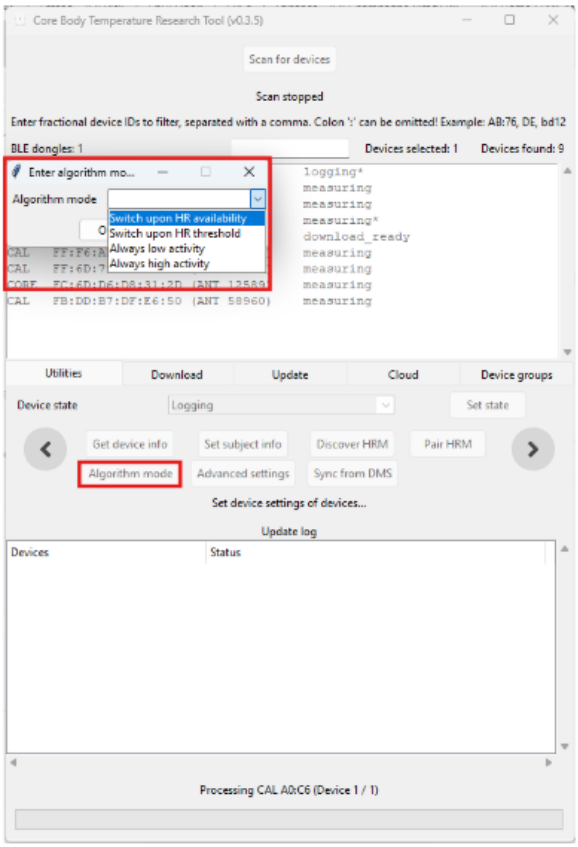
Algorithm mode

The four algorithm modes (**Picture 5**) :

1. **Always Low Activity**: Designed for low-intensity situations such as sleep monitoring, circadian rhythm studies, or everyday use.
2. **Always High Activity**: Best suited for prolonged physical activity, such as sports or manual labor.
3. **Switch upon HR Threshold**: Automatically switches from Low to High Activity Mode when the heart rate exceeds 120 bpm.
4. **Switch upon HR Availability**: Uses High Activity Mode only when heart rate data is available. As soon as it detects a heart rate signal (even during sleep), it switches from Low to High Activity Mode.

⚠ Please refer to our flow chart to choose the right algorithm for you or contact info@caleraresearch.com

As a standard, we recommend using always low activity for sleep/circadian rhythm studies and always high activity for sports science/occupational health studies.

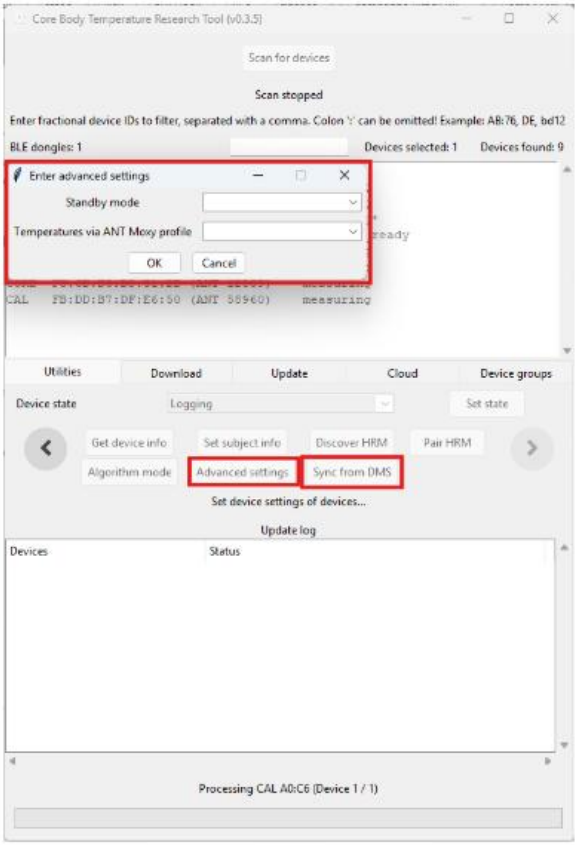


5 Setting correct Algorith mode

Advanced settings

- Standby mode: set the device to go into "standby" mode when it detects no skin contact for over 10 minutes
- Temperatures via ANT Moxy profile: special feature to enable recording of core temperature with Wahoo devices

(Picture 6)



6 Advanced Settings

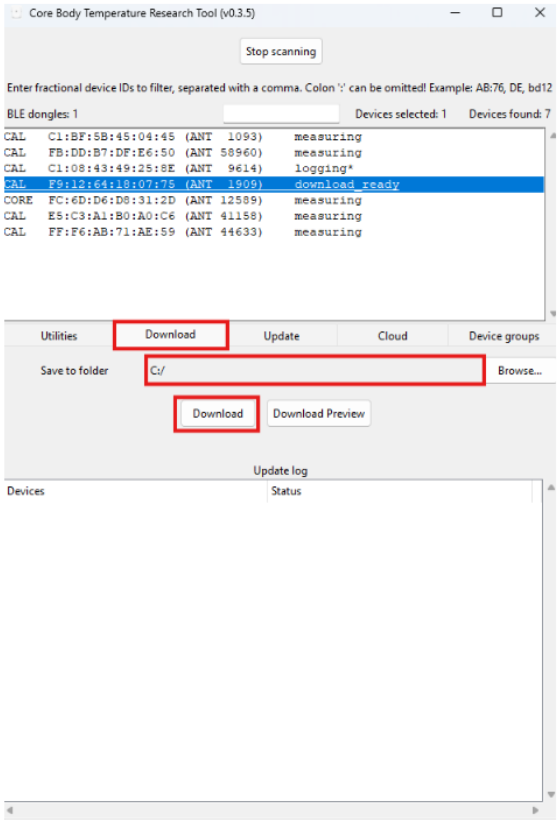
Other Tabs

Download

(Picture 1)

1. After logging mode, set your device to 'download ready' mode (Set state → Download ready).
2. Select the device you wish to download data from.
3. Choose where to save your file ('Browse').
4. Click 'Download' and wait for the process to finish ('Download complete').

Data will be downloaded one device at a time and saved to your chosen location. If you are using multiple dongles, you can download from several devices simultaneously.

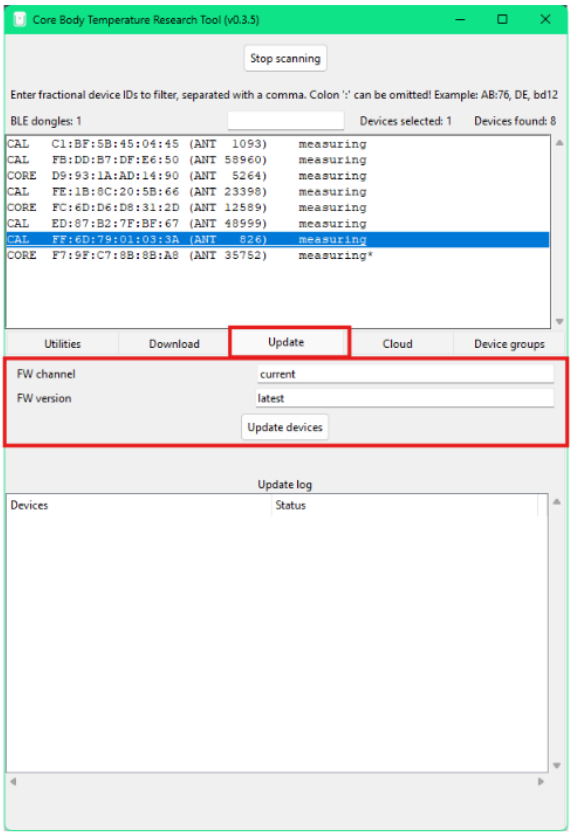


1 Download

Update

(Picture 2)

Select the device you want to update, then click 'Update devices.'
Keep the FW Channel set to 'current' and the FW Version on 'latest' unless otherwise directed by the CALERA team or prompted by a notification.
You can monitor the progress of the update in the update log.

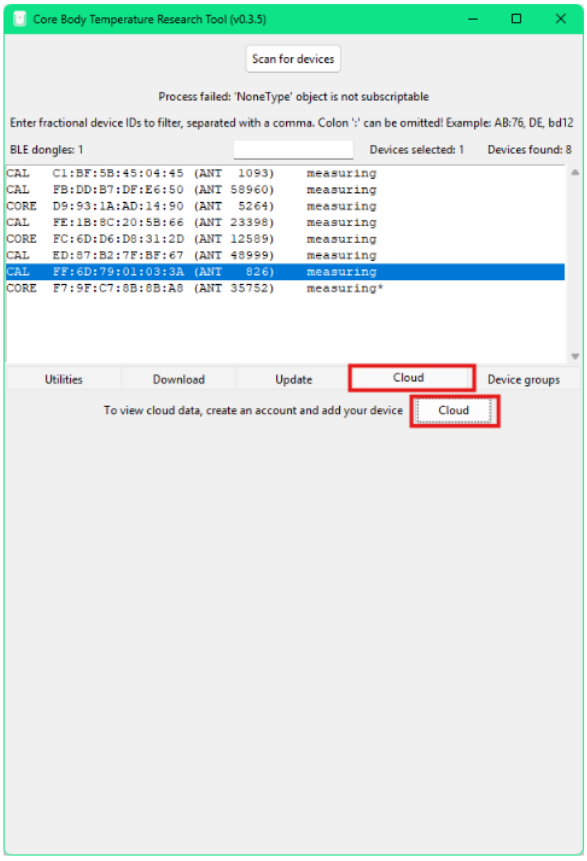


2 Update

Cloud

(Picture 3)

Access cloud-based historical data at one-minute resolution. To view your data, please create an account and register your sensor(s) to your profile.



3 Cloud

Device Groups

(Picture 4)

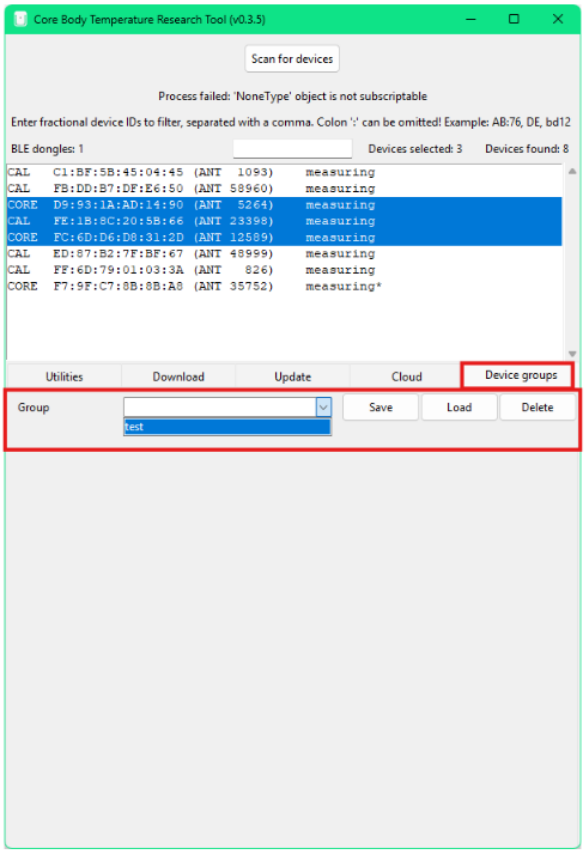
To create a group: Hold the CTRL key and select the desired devices. Enter a group name in the text box and click 'Save.'
Groups are stored locally on your computer and remain available until you delete them. You can create multiple groups, each containing one or more devices.

To select a group: Click the arrow to expand your saved groups, select a group name, and click 'Load.'

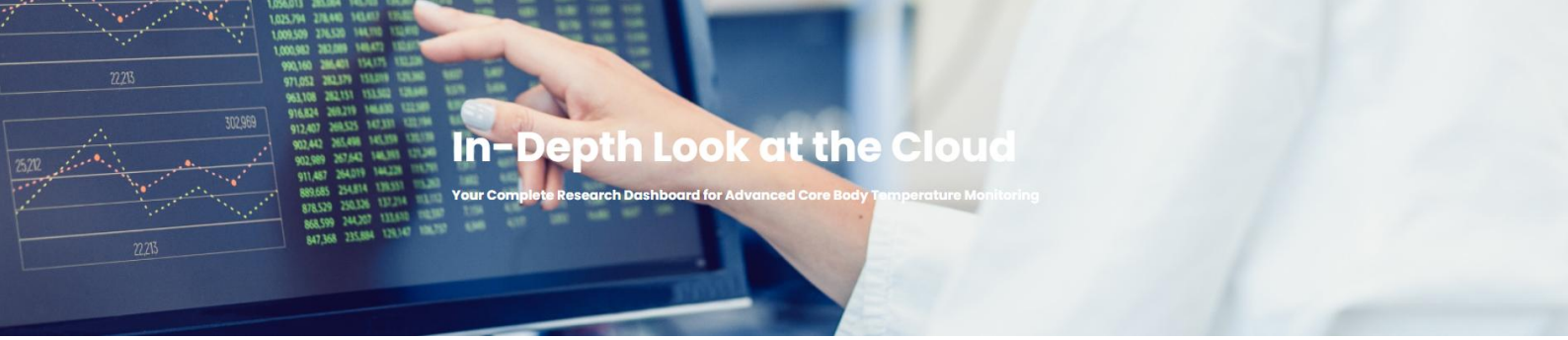
Note: Devices must first appear in the scan list. Groups only reference devices that have been scanned and displayed.

Save: Store a new group of devices
Load: Highlight devices from a saved group
Delete: Remove a group from your list

Once your devices are grouped, you can quickly highlight all devices in that group by selecting the group name and clicking 'Load.' This allows you to efficiently manage recording states (e.g., start or stop) across all devices in the group simultaneously.



4 Device Groups



Overview

The Calera research Cloud Platform serves as your centralized command center to view the devices associated with your account and download their data.

Key Features

- **Multi-Device Access**: Access multiple Calera devices from a single platform
- **Real-Time Data Visualization**: Access live core body temperature data and device status with automatic updates when the app is open and the device is synced via it
- **Data export**: Export collected data

⚠️ Haven't created an account yet? Get started here

Interface Overview

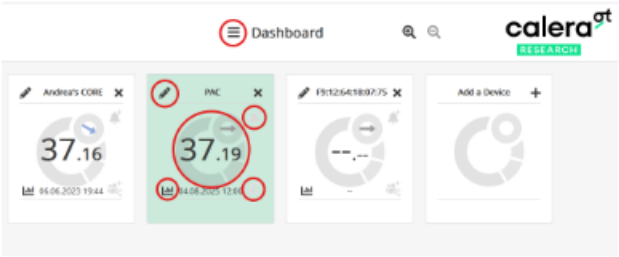
- **Dashboard:** View real-time status for all connected devices & manage devices.
- **Viewing Data & retrieveing data:** Have an overview of the collected data & download it in a CSV file

---

Dashboard

After you log in to the Calera Cloud Dashboard, the main page displays all your connected Calera devices. For each device, you can:

- View the most recent core body temperature datapoint synced via the app, clearly shown in the center of the device's circle.
- See the device name and easily rename it by clicking the pencil icon .
- Set a temperature alarm to receive notifications when the core body temperature reaches your chosen limit.
- View your data by clicking on the graph icon .
- Easily share device access for collaborative monitoring. Participants can log in to the Calera app to sync data daily, as long as Bluetooth and the internet are enabled. You will then be able to see the data they synced to your account. To prevent data loss, devices must be synced at least once per day; otherwise, older measurements could be overwritten.



Manually add a new device to your dashboard by entering its unique ID.

To add subject-specific details, click on the open three-bar icon and in User Settings.

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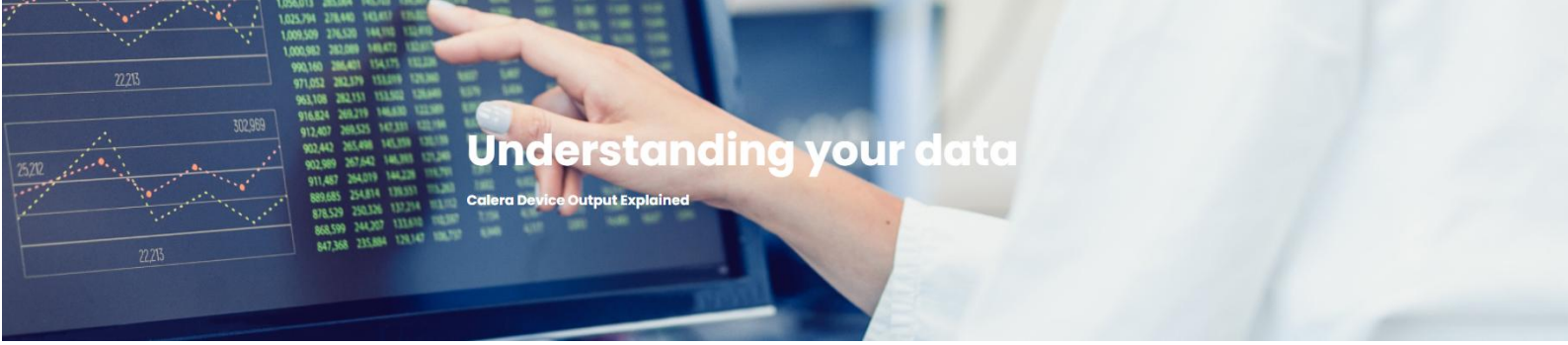
Viewing your Data

When you click on the graph icon, you will be redirected to a new window with the data on graphs.

- To see your data, simply click the start date and then click the end date, this selects the time range you want to explore and download. (Dates highlighted in green are the days when your device recorded measurements).
- After selecting your dates, the dashboard will automatically display a graph showing your data between the two days you selected. It will show
  - core body temperature (green line)
  - skin temperature (orange line)
  - temperature change rate (blue & red bar graph)
  - heat strain index (yellow line)
  - heat flux in (purple line)
- Learn more about the heat strain index here:
  👉 What is the Heat Strain Index?
- Click legend items to show or hide graph lines.
- Download the graph as a PNG
- Zoom in by selecting a time range on the graph. To zoom out, click the "Autoscale" button. You can also select an area to view by clicking and dragging.
- Tag activities for specific periods and search tags to quickly find them on the graph.
- Hover to see exact values or shift the graph to view different date ranges.

To download your data as a CSV file, click the download button in the top right corner. It will download the data in the selected time range.



Understanding your data

Calera Device Output Explained

Overview

Calera research devices deliver high-resolution data on core body temperature and physiological responses in a structured CSV file. Outputs include core body temperature, skin temperature, accelerometer data, heart rate when paired, and precise timestamps for detailed analysis.

Key Features

- **High-Resolution Sampling**: 1Hz or 1-minute sampling.
- **Multi-Stream Data Output**: Simultaneous collection of core temperature, skin temperature, heat flux, accelerometer, heart rate, and battery status in a single integrated dataset.
- **Comprehensive Metadata**: Subject information, device specifications, firmware version, and calibration parameters are automatically included in every export file.

Overview

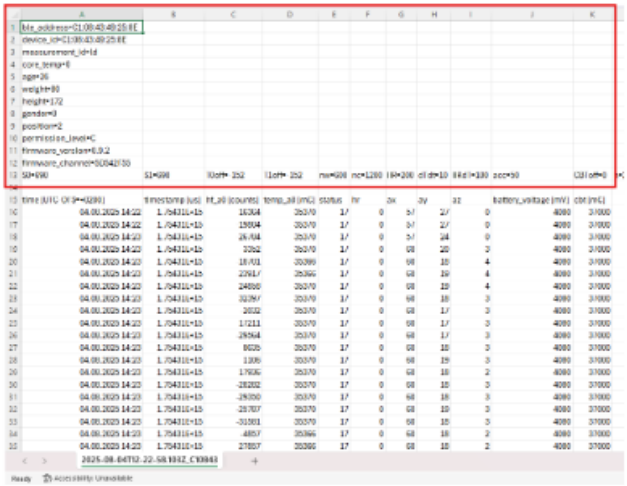
- **Subject Information:** Participant metadata integration
- **Output Columns:** overview of the collected data
- **Understanding Acceloremeter Data:** 3-axis accelerometer captures movement patterns and body orientation changes
- **Understanding the Calculations:** a brief overview of how calculations are made

---

Subject Information

On the top part of the CSV file, you can retrieve the following information:

- BLE address
- Device ID
- Measurement ID
- Core temp
- Subject information: age, weight, height, gender (0 = male, 1 = female)
- Position of the device
- Permission level = C is for researchers
- Firmware information (version & channel)



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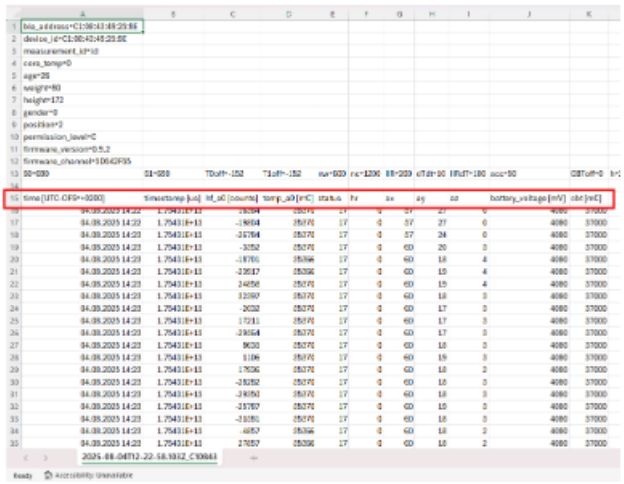
Output Columns

timestamp [us]	Timestamp in UNIX time in us (microseconds elapsed since January 1th 1970)
time [UTS - OFS =+ 0100]	Timestamp of the data point in the format "DD:MM:YYYY hh:mm:ss"
hf_a0	Raw heat flux sensor signal in ADC counts (unitless).
temp_a0 [mC]	Uncorrected skin temperature signal in millidegree Celsius.
status	Debugging Information
hr	Beats per minute (bpm) of the heart
ax, ay, az	X, Y, and Z component of acceleration in counts. *Divided by 64 to get acceleration in G.*
battery_voltage [mV]	Coin cell voltage in millivolts. Can be used to estimate battery health.
cbt [mC]	Core body temperature estimation output in millidegrees.



Understanding Acceloremeter Data

Accelerometers measure acceleration, **not** position, using X, Y, and Z axes based on the device's orientation.

The device records movement data every second, making it easy to see when someone is active or still.

To figure out which axis is which, place the device on a flat surface. The axis pointing up or down will show about ±1g (you can find this by dividing the raw number by 64). Try rotating the device to see how the values change, this helps you understand how each axis responds to movement.

Understanding the Calculations

To obtain heat flux and skin temperature, some short calculations need to be done.

How to obtain calibrated heat flux and offset-corrected skin temperature:

Heat flux:	Multiply the raw heat flux sensor signal by 1.953125 uV to get the raw sensor voltage. To obtain a heat flux value in W/m^2, you additionally need to divide the sensor signal by its corresponding sensitivity. The sensitivity of each sensor is given in row 13 of the header section (S0 and S1) in the unit of nV/ (W/m^2) *Heat flux sensor A voltage [in uV] = hf_a0 [in counts] * 1.953125 uV* *Heat flux A [in W/m^2] = hf_a0 [in counts[* 1.953125 / (S0/1000)*
Skin temperature	Remove sensor offset (Tni_off in row 13 of the header) and divide by 1000. *Skin Temperature [in °C] = (temp_a0 [in mC] - Tni_off)/ 1000* Note: In older files, the Tni_off value might be missing. In that case use T0_off and following formula, which will lead to the same result: *Skin Temperature [in °C] = (temp_a0 [in mC] - T0off - 213)/ 1000*

The table below shows the status column, which provides a quality score from 0 to 4, with 4 indicating the highest data quality.

Status	Status in hexadecimal	Quality
17-18	0x12	0
33	0x21	1
34	0x22	2
35	0x23	3
36	0x24	4

Troubleshooting

If your question is not answered here, contact info@caleraresearch.com

Enter keyword

No Connection?

If your device does not appear on the list
It could take a few seconds for the device to appear in the list when you open the research tool;
if not, please:

1. Gently shake the device and scan again
2. Try a magnet reset (**Picture 1**)
    - Rub the magnetic end of the charger against the back of the device, the LED should flicker, and after a few seconds try another scan
3. Battery Drain and Recharge: Let the device's battery drain completely, then fully charge it before trying to connect again.

⚠️ If a device in logging mode is magnet reset, it will put it in download ready, so data won't be lost until the moment of the magnet reset

1 Magnet Reset

Error Message: HTTPSconnectionPool

(**Picture 2**)

You need an internet connection to download data, update firmware, or sync with the DMS.
If you see this error, check your connection or firewall settings.
Try running the software as an administrator and ensure all permissions are granted.

2 Error Message HTTPSconnectionPool

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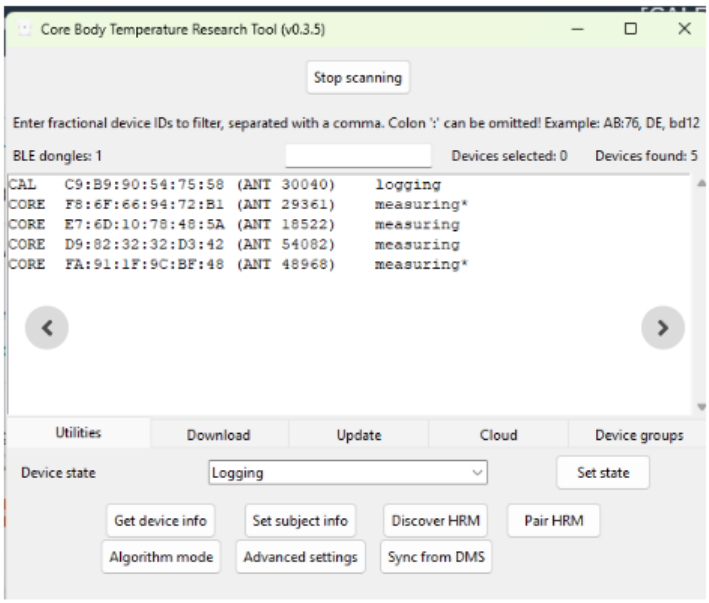
Star next to device state on software?

(**Picture 3**)

If Calera is already connected to another phone or PC, you'll see a star next to its status (e.g., "measuring*").
To control the device with your PC, first disconnect it from the other source and then rescan.
Each Calera device can connect to only one app or software at a time.



3 Star next to device state

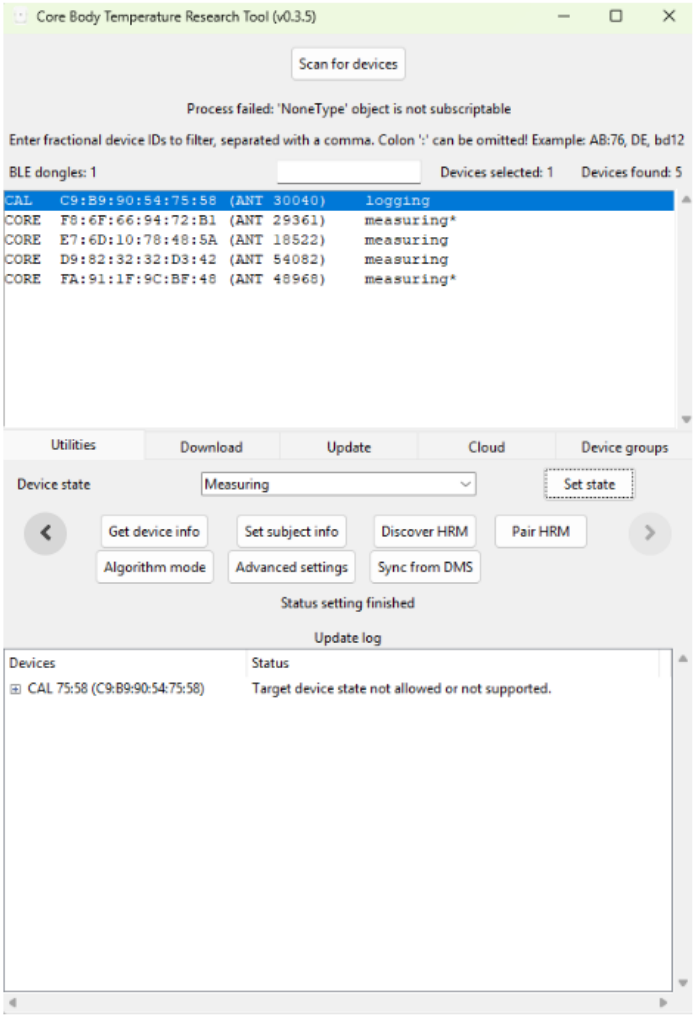
Target device state not allowed or supported?

(**Picture 4**)

If you can't download data, check the following steps:

- Use the correct download sequence:
  - set the device to logging mode & proceed with protocol,
  - switch to download ready
  - download data with the PC tool
  - the device will return to measuring mode automatically.

⚠ Do not try to download data directly from measuring mode; this will not work.
⚠ Close the app on your phone before downloading.
⚠ You cannot change some settings while the device is in logging mode.

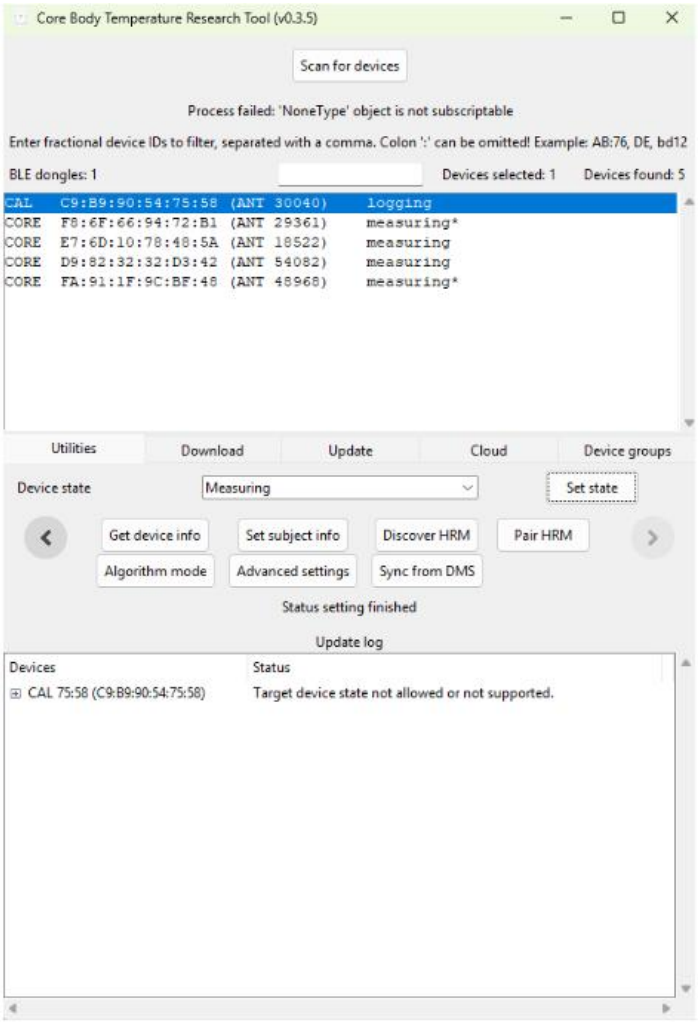


4 Target device state not allowed or supported

No Heart Rate Data?

If you're not receiving heart rate data when using multiple Calera and HRM devices, follow these steps:

- Ensure each Calera is paired with its matching HRM heart rate monitor—mix-ups are common
  - For easy identification, use color-coded stickers to match each Calera device with its paired heart rate monitor.
- Pair using the ANT+ (five-digit code) in the PC tool, instead of the BLE channel, for stable connections.
- If you've already paired but see no heart rate data:
  - Unpair all devices by clearing the pairing field.
  - Take one Calera and one HRM to a separate room.
  - Open the PC tool, discover the HRM, and pair it with the ANT+ channel.
  - Label each Calera and HRM pair for clarity.
  - Repeat for all device pairs.



4 Target device state not allowed or supported