



# REEV SENSE

Simple, Quick and Objective gait analysis

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## User Manual

Thank you for  
choosing REEV



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# 1. INTRODUCTION

This manual contains general instructions for operation, precautionary instructions, and maintenance recommendations for the REEV SENSE Pack. To maximize the lifespan and performance from your REEV SENSE device, and to assist the proper operation of the unit, read and understand this manual thoroughly.



Committed to ecological values, REEV is working to make its processes more environmentally friendly. Your REEV SENSE PACK contains recycled and recyclable materials and bio-sourced components.

For any further information, you can consult our website [www.reev.care](http://www.reev.care) or contact the REEV team by using our contact information at the end of this manual.

Name	Version	Revision history	Date
RVP1-120-EN	01	User Manual, English version	13-OCT-2023
RVP1-120-EN	02	App screenshots updated Add of band width of BLE	22-MAY-2024
RVP1-120-EN	02 rev1	App screenshots updated	16-OCT-2024
RVP1-120-EN	02 rev2	Min OS versions updated	21-MAY-2025
RVP1-120-EN	03	Updated for SENSE V2	10-DEC-2025

## TERMS AND DEFINITIONS

HCP: Healthcare Professional

MEU: Main Electronic Unit

IMU: Inertial Measurement Unit

MRI: Magnetic Resonance Imaging










HF: High-Frequency












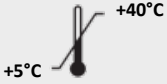
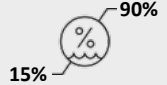
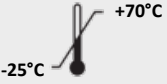
RF: Radio-Frequency

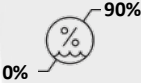
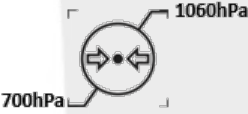



BLE: Bluetooth Low-Energy

## 2. SYMBOLS, CAUTION & WARNINGS

### SYMBOLS DESCRIPTION

	<p><b>Logo</b> This is the REEV company logo. It is present on all our products and most of our accessories.</p>
	<p><b>Catalogue number</b> Indicates the manufacturer's catalogue number so that the medical device can be identified. (MEU - Main Electronic Unit, CS - Charging Station, PKG - Packaging).</p>
	<p><b>Serial number</b> Indicates the manufacturer's serial number so that the medical device can be identified. (REEV_P1.4_Y_XXXX - Y indicates the part type: M for Main Electronic Unit, C for Charging Station, P for Packaging).</p>
	<p><b>Unique device identifier</b> Indicates a carrier that contains unique device identifier information.</p>
	<p><b>Medical device</b> Indicates the item is a medical device. REEV SENSE is a class I medical device per MDR 2017/745.</p>
	<p><b>European Conformity</b> Certifies that the product has met EU health, safety, and environmental requirements, which ensure consumer safety.</p>
<p>IP67</p>	<p><b>Protection level indication</b> Dust-tight, Protected against the effects of immersion (up to 1m/30min).</p>
<p>IP22</p>	<p><b>Protection level indication</b> Protected against solid foreign objects of 12.5mm diameter and greater Protected against drops of water falling at up 15° from the vertical.</p>
	<p><b>Applied part</b> Indicates this part is intended to be worn by the user.</p>
	<p><b>MRI room contraindications</b> This medical device shall not be used near an MRI and shall not enter the MRI room.</p>
	<p><b>Pacemaker and magnetic components</b> This medical device contains magnets that may interfere with the correct functioning of a pacemaker or implantable defibrillator. Keep distance from these devices.</p>

	<p><b>User manual</b> Refer to user manual.</p>
	<p><b>Non-ionizing electromagnetic radiation</b> Informs the user of possible hazards resulting from elevated, potentially dangerous level of non-ionizing radiation.</p>
	<p><b>Waste collection indication</b> Separate collection for electric waste and electronic equipment is required and the equipment shall not be disposed of in the normal waste management stream.</p>
	<p><b>Manufacturer</b> Indicates the medical device manufacturer.</p>
	<p><b>Date of manufacture</b> Indicates the date when the medical device was manufactured.</p>
	<p><b>QR Code</b> Scan it to quickly access REEV website <a href="https://www.reev.care/">https://www.reev.care/</a>.</p>
<p>Label p/n: P1_BOM_ITEM_XXvXX</p>	<p><b>Label part number</b> Indicates the label identifier and version.</p>
<p>INPUT 4,2V  0,22A</p>	<p><b>Powering level indications</b> The ideal powering source is 4,2 Volt, 0,22 Ampere electrical power source.</p>
<p>INPUT 5,0V  1A OUTPUT 5,0V  0,5A</p>	<p><b>Powering level indications</b> The ideal powering source is 5 Volt, 1 Ampere electrical power source. The power output is 5 Volt, 0,5 Ampere electrical power source.</p>
	<p><b>Fragile, handle with care</b> Indicates a medical device that can be broken or damaged if not handled carefully.</p>
	<p><b>Keep dry</b> Indicates a medical device that needs to be protected from moisture.</p>
	<p><b>Temperature limits</b> The room temperature for use shall be kept between +5°C/+41°F and +40°C/+104°F. After storage outside of use temperature, wait one hour at ambient temperature before use.</p>
	<p><b>Humidity limits</b> The room humidity level for use shall be kept between 15% and 90%.</p>
	<p><b>Storage temperature limits</b></p>

	The room temperature for storage and transport shall be kept between -25°C/-13°F and +70°C/+158°F.
	<b>Storage humidity limits</b> Humidity level for storage and transport shall be kept between 0% and 90%.
	<b>Pressure limits</b> Do not use or store at altitudes above 3,000 meters. Only use or store in environmental pressure between 700hPa and 1060hPa.
	<b>Federal Communications Commission</b> Contains an FCC-approved wireless transceiver module. FCC ID: T7V1780 IC ID: 216Q-1780
	<b>WARNING</b> Text with this indicator will explain possible misuse or safety infractions that will potentially cause harm, and/or equipment damage.
	<b>CAUTION</b> Indicates that caution is necessary when operating the device or that the described situation needs operator awareness or operator action in order to avoid undesirable consequences.



Short press



Long press ~1sec



Press and hold >1sec



Slide/scroll



Type



LED ON



LED fading



LED blinking

 **CAUTION**

- Read, understand and practice the precautionary instructions found in this manual. Know the limitations and hazards associated with the device.
- Do not try to open the device or the charging station. Do not try to damage the components by any means (mechanical, electrical, heat, fire, water, etc.) including the labels.
- Make sure to correctly clean the device and its detachable parts between patients by following the instructions in this manual.
- Do not allow any foreign bodies (soil, water, metal, dust, etc.) to penetrate the device, the battery compartment and the charger.
- Only use the device with the accessories provided in the pack.
- Keep the device out of reach of unsupervised children.
- Do not recharge in a confined space (carrying case, etc.).

## REEV SENSE


- Do not use at altitudes above 3,000 meters. Use only between 700hPa and 1060hPa.
- Only use the device and the app as indicated in this manual.
- If you notice any kind of deterioration of the device or its detachable parts, do not use the device, contact us with the information at the end of this manual.
- The device or detachable parts shall not be ingested.
- The device or detachable parts shall not be disposed of in regular bins.
- The device or its detachable parts shall not be rubbed on the patient's skin.
- The device and its detachable parts include magnets and shall not enter the periphery of any other system that can be impacted by magnetic fields.
- The use of the device shall not generate excessive heat. Should this occur, turn it off and contact our services with the information at the end of this manual.
- The device may interfere with the correct functioning of a pacemaker or implantable defibrillator. Keep distance from these devices.
- Do not clean or apply any humidity to the Charging Station.
- The device shall be transported by placing all parts in the Tech Organizer as specified.
- The use of the device and its detachable parts shall not cause any discomfort to the patient. If this occurs, stop the use and check the instruction for use or contact us with the information at the end of this manual.
- If in need of assistance regarding the installation, use or maintenance of the device, or in order to communicate an unusual behavior or event, please contact our services using the information at the end of this manual.
- The device must be used in environments which do not present any unusual or excessive magnetic field, electromagnetic field, external electrical disturbance, electrostatic discharge, pressure or pressure changes, acceleration or thermal combustion sources.
- The internal rechargeable battery is rated for 300 charge/discharge cycles.
- The device must be fully charged before first use.
- The device must be recharged every 3-4 months during periods of inactivity to prevent activation of the protective lockout; avoid prolonged exposure to cold temperatures, which may permanently reduce battery capacity.
- After storing at the minimum or maximum allowed temperature, leave the device for 1 hour at room temperature (+20°C/+68°F) before use.
- In the case of sudden deterioration of the device's performance or in the event of unknown behavior not described in the present manual, stop using the device and contact us with the information at the end of this manual.

## **WARNING**

- No modification of this equipment is allowed.
- Store and/or transport only between -25°C/-13°F and +70°C/+158°F.
- Use only between +5°C/+41°F and +40°C/+104°F.
- Store and/or transport only below 90% humidity.
- Use only between 15% and 90% humidity.
- Do not use near life sustaining devices.
- Do not use the system if a magnet is missing or broken.
- The MEU and the detachable parts are to be worn over clothing and not to be in contact with the patient's skin during use.
- Ensure that each sensor, strap and pod is properly placed: any misplacement or sensor exchange will lead to analysis errors.
- Follow specified cleaning instructions.
- Use only specified cleaning products.
- Do not use the device beyond its expected lifetime.
- Do not use in or near electromagnetically noisy environments (MRI room, HF surgical equipment).
- Do not discard the device, please contact your distributor or manufacturer to ensure proper recycling.
- In the case of severe gait abnormalities, results of gait analysis may be unreliable.
- Use only with power supply output limited to 15W/900J to supply the charging station.
- Use at least iOS 15.5 or Android 7.0 to install the application
- Use the mobile application on a device with location services and Bluetooth enabled.
- Use at least Bluetooth 4.0.

## RESIDUAL RISKS

If a MEU is not aligned with the charging station the battery can overheat.

 **Make sure to correctly align the MEU with the charging station.**


Battery can overheat due to internal short circuit.

If the user uses an improper power supply (output greater than 15W/900J), the battery can overheat.


 **Do not use if the device is hot or blazing.**

Electrostatic discharges can occur and cause the battery to overheat.

Electromagnetic disturbances created by the device can cause other devices to malfunction.

 **Do not use near life sustaining devices.**


Using device beyond its expected lifetime can lead to a battery leakage and can cause overheating.

 **Do not use the device beyond its expected service life.**

Missing or illegible labeling can lead to unsafe use of the device.

 **Do not use the device if labels and IFU are missing and/or unreadable.**

If the device is not stored and/or transported within the specified temperature and/or humidity conditions the battery cannot withstand the conditions and may explode or malfunction.

 **Do not use the device or use it carefully if you are not sure of the conditions under which it has been stored and transported.**

Repeated contact with nickel may cause irritation and/or allergy

 **Avoid prolonged contact between the skin and the pod magnets.**

Some people may develop allergies due to repeated contact with nickel

 **If you have known allergies to nickel avoid all contact with the magnets.**

Any serious incident involving the device must be notified to the manufacturer and to the competent authority of the Member State in which the user and/or patient is established, or any relevant regulatory authority.

## WARRANTY

This device carries a limited warranty of 1 year from the date of delivery. The warranty applies to the device and the charging station only; the detachable parts are not covered by this warranty.

During the warranty period, defective items will be repaired or replaced at no charge. Any evidence of misuse, abuse, alterations or externally caused damage invalidates the warranty. Any use deviating from the 'proper use' described in this manual is considered misuse.

For more information, please contact REEV LLC with the information at the end of this manual.

### 3. TECHNICAL DATA

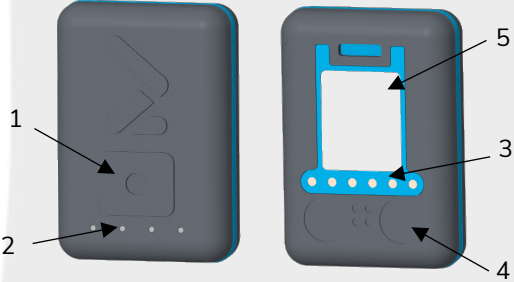
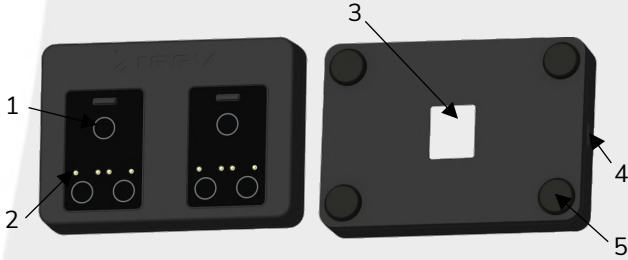
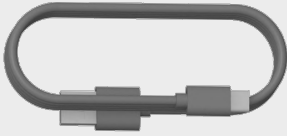
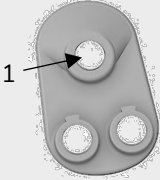
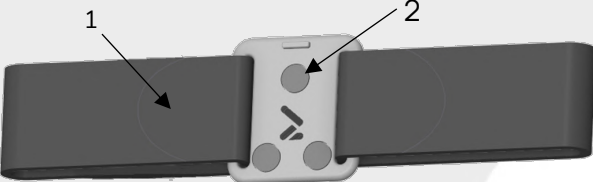
- Accelerometer: 3 degrees of Freedom: Ax, Ay, Az (linear acceleration)
  - Range= [-16g to +16g]
  - fc = 100Hz
  - Sensitivity = 0.488mg
- Gyroscope: 3 degrees of Freedom: Gx, Gy, Gz (angular velocity)
  - Range= [-2000°/s to +2000°/s]
  - fc = 100Hz;
  - Sensitivity = 0.07°/s
- Communication:
  - BLE 4.0 connection
  - Bandwidth: 2.4GHz
  - Emitted power: 0dBm
- Protection:
  - IP67 for Main Electronic Unit (Sensor)
  - IP22 for Charging Station
- Operating temperature: +5°C/+41°F and +40°C/+104°F
- Size:
  - Main Electronic Unit (Sensors): 64mm x 45mm x 15mm.
  - Charging Station: 92mm x 65mm x 20mm.
- Mass:
  - Main Electronic Unit (Sensors): 23 grams.
  - Charging Station: 35 grams.
- Power:
  - Battery Lithium Polymer 3,7V (3V to 4,2V) 110mAh.
  - Supervised Mode Autonomy: 10h (depends on sensors usage).
  - Charging time: 3 hours.
- Expected lifetime:
  - 3 years.

Find out more on our website [www.reev.care](http://www.reev.care)

## 4. SYSTEM OVERVIEW

REEV SENSE is a wearable sensor system for gait analysis in adult post-stroke patients with gait impairments. The system includes compact, battery-powered IMU sensor packs (for thigh, shin, and/or shoe placement) and a dedicated mobile app for device control, data acquisition, and results visualization.

The following table describes the different parts of the REEV SENSE PACK:

	<p><b>2x REEV SENSE device / Main Electronic Unit (sensors)</b></p> <ul style="list-style-type: none"> <li>1 - Main button</li> <li>2 - LEDs</li> <li>3 - Golden electrical contact interfaces</li> <li>4 - Magnets</li> <li>5 - Label</li> </ul> <p><i>Envelope materials: Thermoplastic TM7MED, Polycarbonate Makrolon</i></p>
	<p><b>1x Charging station</b></p> <ul style="list-style-type: none"> <li>1 - Magnets</li> <li>2 - Golden electrical contact interfaces</li> <li>3 - Label</li> <li>4 - Female USB-C port</li> <li>5 - Anti-slip pads</li> </ul> <p><i>Envelope materials: ABS V0</i></p>
	<p><b>1x USB-C cable</b></p> <p><i>Envelope materials: PVC 35P</i></p>
	<p><b>2x Shoe interface</b></p> <ul style="list-style-type: none"> <li>1 - Magnets</li> </ul> <p><i>Envelope materials: PA11</i></p>
	<p><b>6x Thigh/Calf straps and 4x interfaces (applied parts)</b></p> <ul style="list-style-type: none"> <li>1 - Silicone-impregnated elastic strap</li> <li>2 - Magnets</li> </ul> <p><i>Envelope materials: Polyester, Spandex, Elastane, PA11</i></p>

## 5. OPERATING PRINCIPLE

REEV SENSE is a device that objectively measures characteristic gait parameters using inertial measurement units. Proprietary biomechanical algorithms perform kinematic and spatiotemporal analysis. The device is paired with a mobile application that displays and compares results. Both sensors communicate using RF (Radio-Frequency, BLE: Bluetooth Low-Energy). An average gait parameter acquisition with REEV SENSE lasts about 3 minutes.

## 6. INTENDED PATIENT POPULATION

### INDICATIONS FOR USE

REEV SENSE is indicated for use in clinical settings (such as hospitals and rehabilitation centers) on adult, ambulatory post-stroke patients with gait impairments. The device provides objective analysis and monitoring of knee and ankle kinematics, as well as spatiotemporal gait parameters. REEV SENSE is to be used solely under the supervision of a healthcare professional.

### CONTRAINDICATIONS

The use of the device is contraindicated in the following cases:

- Do not use REEV SENSE for medical diagnosis.
- Do not use REEV SENSE without supervision by a qualified healthcare professional.
- Do not use REEV SENSE as the sole source of information for medical decisions.
- Do not use REEV SENSE in pediatric patients or non-ambulatory individuals.
- Do not use REEV SENSE in patients with contraindicated comorbidities as determined by the healthcare professional.
- Do not use REEV SENSE in patients unable to communicate discomfort.
- Do not use REEV SENSE in patients with known allergies to materials used in the sensor or strap components.
- Do not use REEV SENSE in case of open wounds or skin infections at or near the intended sensor placement site.
- Do not use REEV SENSE on patients with severe spasticity or uncontrolled muscle contractions that could dislodge or damage the device.

### PATIENT AGE

Patient older than 17 years old.

## 7. INTENDED PART OF BODY IN CONTACT

The sensors of the REEV SENSE (called MEUs) are intended to be used with straps outside of clothing on the thigh, shin and foot. It must be manually installed by the healthcare professional.

The charging station of the REEV SENSE is intended to be laid onto a table, and the sensors shall be placed onto pogo pins to charge the internal battery by the user.

The evaluation of the maximum contact time between skin and each part of the device is:

Part	User	Patient	Scenario
MEU	45s	0s	User turns the MEU ON, initializes Bluetooth connection with the mobile application, and places the MEU on the patient
Straps	30s	0s	User places the strap & interface on the patient's thigh or shin and adjusts it
Shoe Interfaces	20s	0s	User places the Shoe Interface on the patient's shoe
Thigh/Shin Interfaces	30s	0s	User places the strap & interface on the patient's thigh or shin and adjusts it
Charging Station	10s	0s	User holds the charging station to remove the 2 MEUs from it
USB-C Cable	30s	0s	User manipulates the cable to insert it in the Charging Station and set it up on a desk

## 8. INTENDED USER PROFILE

Operating the device requires specific technical and medical skills:

User group: HCP (Healthcare Professionals)

The user group is composed of the following HCP:

- Physicians
- Physical Therapists
- Occupational Therapists
- Psychomotricians
- Nurses
- Pedicurists-Podologists
- Orthotists
- Prosthetists

The patient shall not be the user.

## 9. USE ENVIRONMENT

The device is intended to be used in a clinical environment; it is intended to be stored in a room at ambient temperature. It is intended to follow the use environment characteristics presented in the following table:

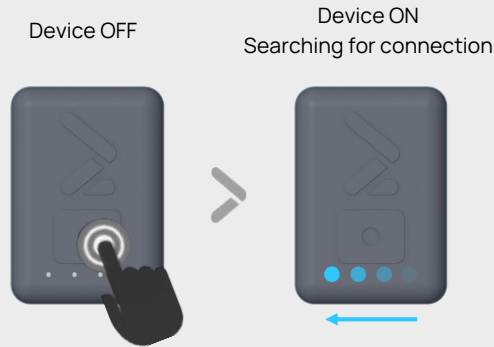
Environment	Description
Physical environment for use	Indoors with a flat, non-slippery, hard and dry floor
Room size	Sufficient to perform an acquisition (At least 20 steps and at least 30 seconds in a straight line)
Temperature	Temperature for use between [+5°C/+41°F; +40°C/+104°F], Storage temperature between [-25°C/-13°F; +70°C/+158°F]
Humidity	Humidity level for use between [+15%; +90%], Storage humidity between [0%; +90%]
Sterility (if needed)	Not applicable
Cleanliness	The device shall be kept clean
Lighting	Sufficient to clearly see the walking environment
Noise (ambient, intermittent)	Not applicable
Interaction with other persons	Not applicable
Other devices in the environment	The device shall not be used near life sustaining devices

# 10. REGULAR DEVICE USE

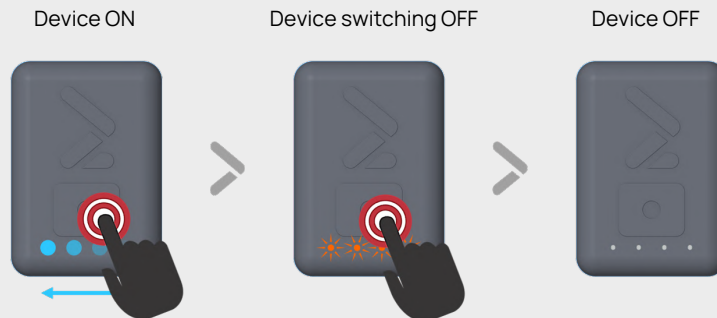
## SENSORS STATES

### SWITCHING THE DEVICE ON / OFF

The device is turned on by a long press on the button (about 1 second), the LEDs on the REEV SENSE device will successively light on and off in blue, creating a sliding fade effect, to signal that the device is ON and ready to be connected to the app.

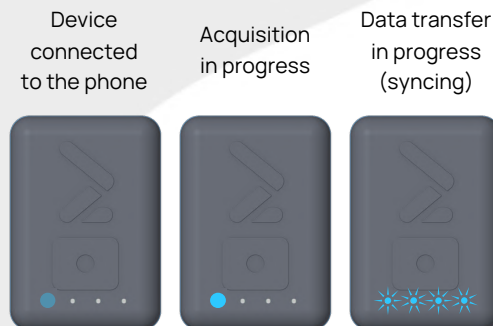


To turn the device OFF, press and hold the main button for about 3 seconds, all LEDs will blink in orange 3 times and the device will be turned OFF.



### OTHER DEVICE STATES

- If the first LED is fading on and off in blue, it indicates that the device is successfully connected to the mobile app.
- If the first LED is lit in blue, it indicates that an acquisition is in progress.
- If all LEDs are simultaneously blinking in blue, the device is sending data to your phone.

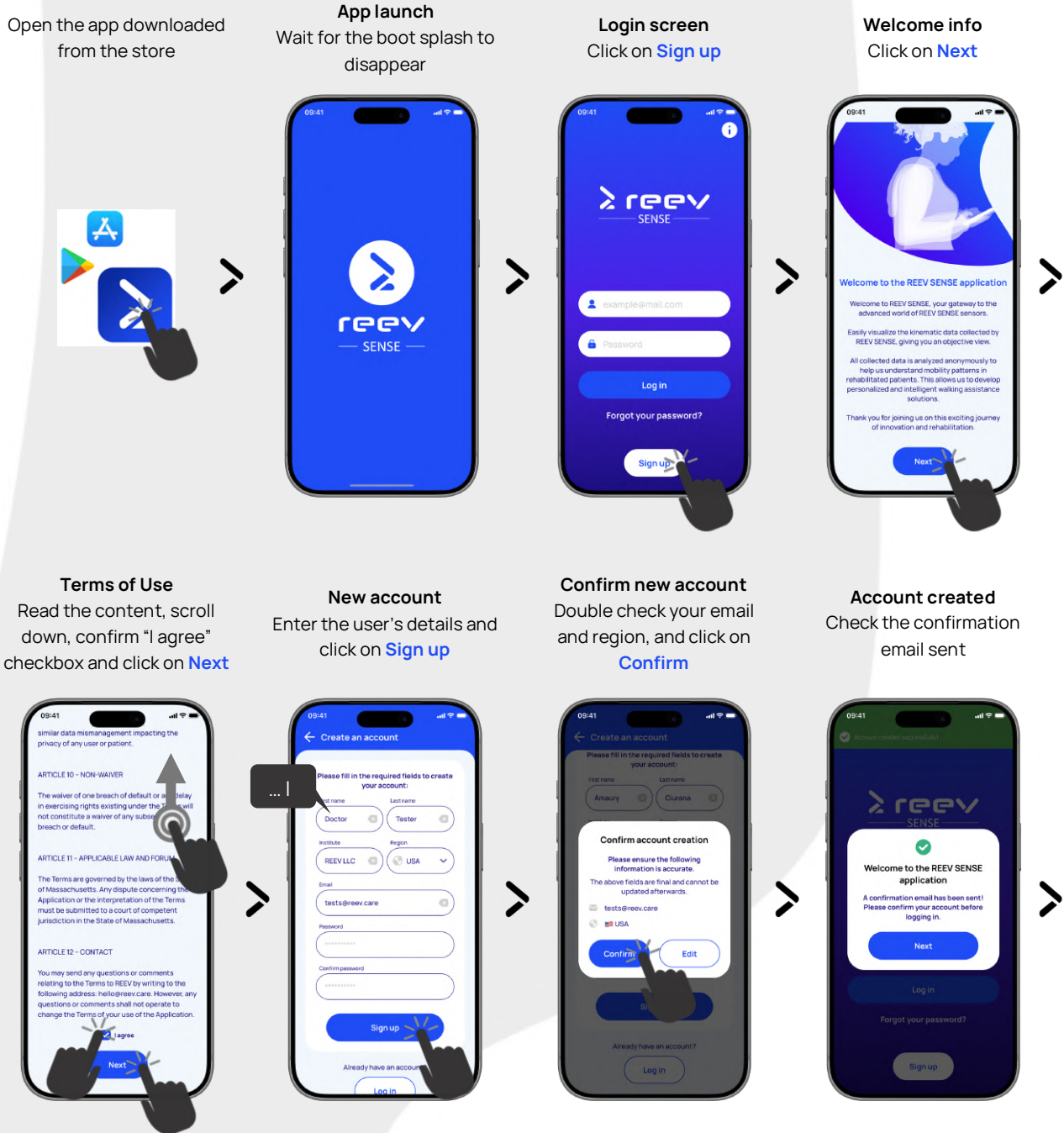


None of these states require any action from the user.

CREATE A NEW ACCOUNT AND LOGIN

Download and open the 'REEV Sense' mobile application on the App Store or Google Play Store. Then complete the Terms of Use acceptance, account creation, and email verification.

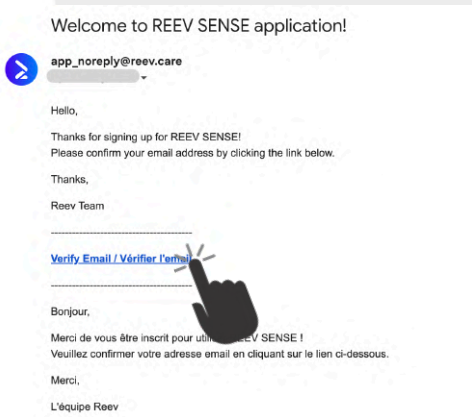
 Use at least iOS 15.5 or Android 7.0 to install the application.



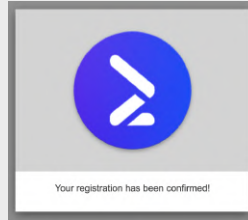
# REEV SENSE

## Mail inbox

Open the received welcome message and click on **Verify Email**

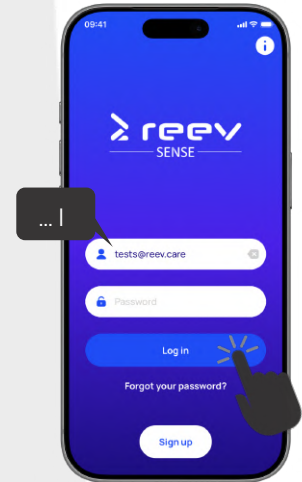


## Account confirmed Login is not allowed



## Login screen

Enter your email and password (if not pre-filled) and click on **Log in**



➤ On login success, the Home screen is displayed:

09:41

Welcome back  
Doctor 🙌

Learn how to operate REEV SENSE to its full potential!  
8 videos • Manual • Onboarding

Actions

2 Manage patients

5 View all reports

Last analysis

Amaury Ciurana  
Spatio temporal  
8 minutes ago →

Usage statistics Show all

Start a new Acquisition

Access to app tutorial videos, user manual and onboarding tour

Check the number of patients registered and the number of reports generated to date

Access to app Settings, Account information and Sensors maintenance

Access to generated Report list

Access to last performed Analysis

Display app usage statistics

Access to Home screen

Access to Patient list and Results

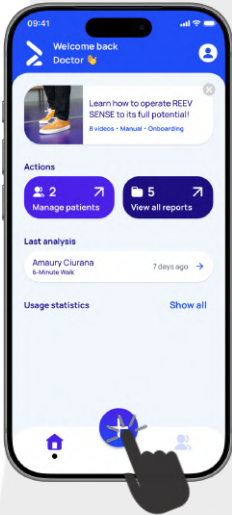
## CONFIGURE A NEW ACQUISITION

Here is the workflow to perform a new gait analysis.

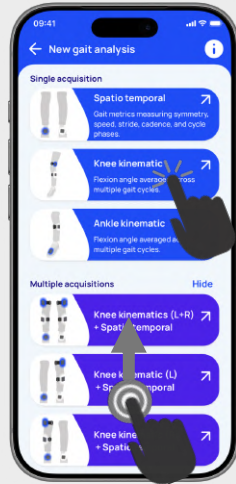


Use the mobile application on a device with Bluetooth turned on.

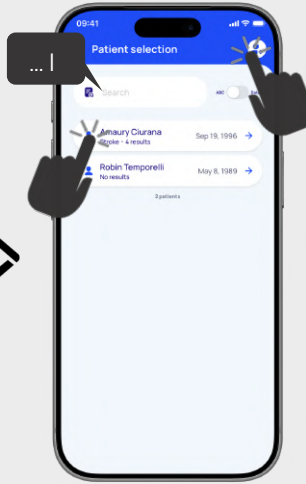
**Home screen**  
Click on + icon to start a new Acquisition



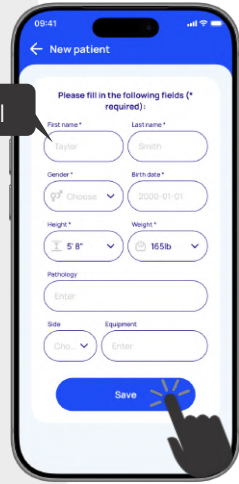
**Acquisition type selection**  
Single / multiple gait analysis or timed mobility test



**Patient selection**  
Search/sort and select from the list; or click on Add icon to create a new patient



**Create a patient**  
Enter the new patient's details and click on Save

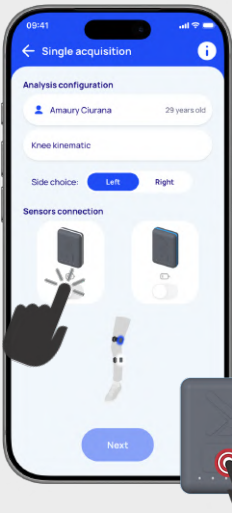


Follow the steps below to select an acquisition to perform and the patient.

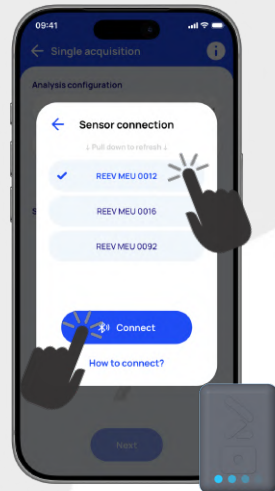
## SINGLE GAIT ANALYSIS

Follow the steps below to connect the MEUs.

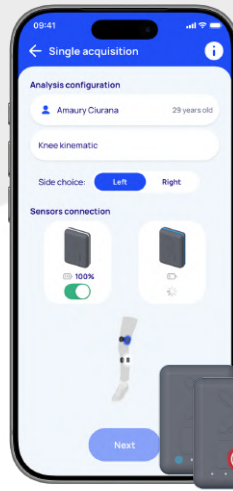
**Connect the white sensor**  
Turn it on and click on the associated switch



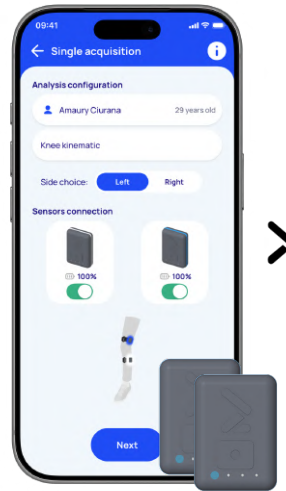
**Select a sensor**  
Confirm REEV MEU XXXX and click on Connect



**Connect the blue sensor**  
Turn it on and click on the associated switch (should be triggered automatically)



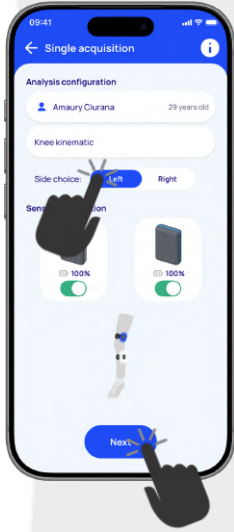
**Sensors connected**  
Check battery levels



# REEV SENSE

## Acquisition configuration

Select appropriate side and click on **Next**

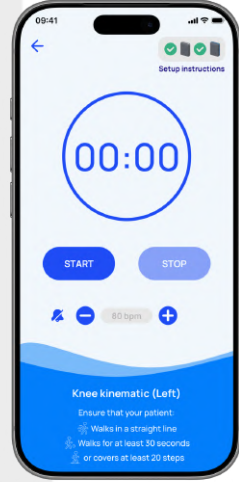


## Place the material and sensors on the patient

Refer to the diagrams + the "SET UP" section of this manual and click on **Start acquisition**



Ready to run the new acquisition



## MULTIPLE GAIT ANALYSIS

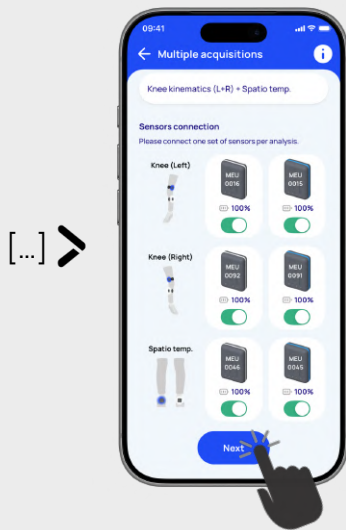
Follow the same steps according to the number of sets of MEUs to connect for the selected acquisition type (could be two or three sets of sensors, one set per analysis).



**Identify the correct MEU names for the associated analysis.**

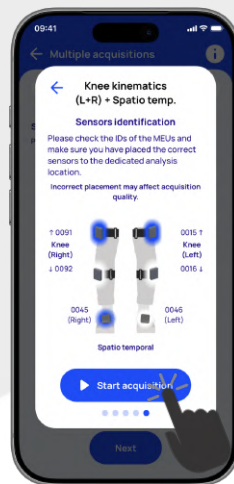
## Connect all sensors sets

Repeat the single gait analysis steps and click on **Next**

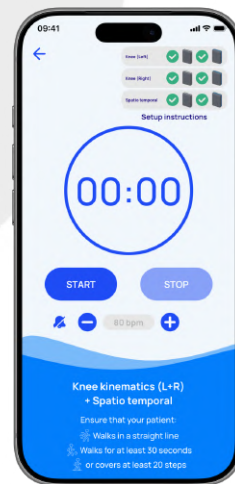


## Sensors identification

Check their IDs and place them at the dedicated analysis location

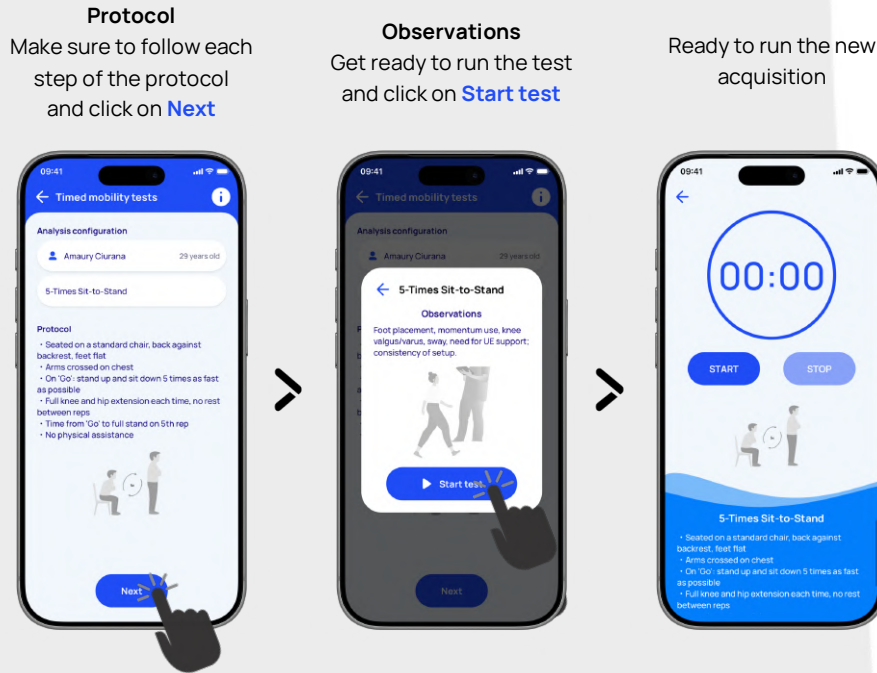


Ready to run the new acquisition



## TIMED MOBILITY TESTS

No sensors required.



## SET UP THE PATIENT

Before starting the acquisition, you will need to equip the patient with the necessary accessories. Depending on the acquisition you will run, you may have to place the device on the thigh, calf and / or shoe of the patient. The app and this manual will guide you on your placement selection, this section provides information on how to properly install the accessories and device on the patient.



**The MEU and the detachable parts are to be worn over clothing and not to be in contact with the patient's skin during use.**



**Ensure that each sensor, strap and pod is properly placed: any misplacement or sensor exchange will lead to analysis errors.**



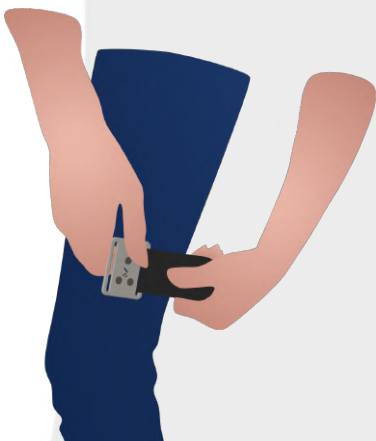
**Do not use the system if a magnet is missing or broken.**

# REEV SENSE

## THIGH AND CALF SET UP

For kinematic tests, in order to calculate knee and ankle flexion angles, you will need to place the devices on the outer side of the calf and thigh. To do so, you will need the Thigh pods and straps (see 'Pack content' in the 'PACK REEV SENSE' section of this manual). Here is a guide on how to properly position and use them above the patient's clothes.

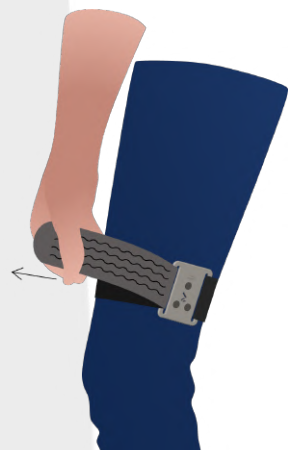
Take strap and pod assembly and place it above the knee, on the outer side of the leg. Make sure the solo magnet is above the two others and the silicone-coated adhesive side faces the leg



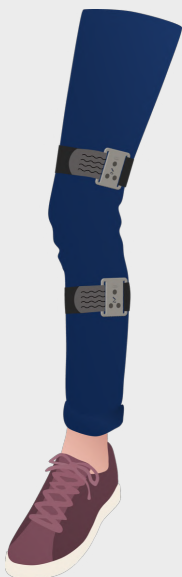
Go around the thigh with the strap and pass the loose end through the free hoop of the pod from back to front



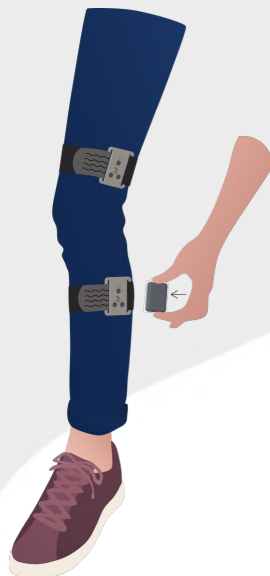
Pull on the loose end to adjust tightening and use the grater to secure it. The strap shall be maintained on the thigh without causing any discomfort to the patient



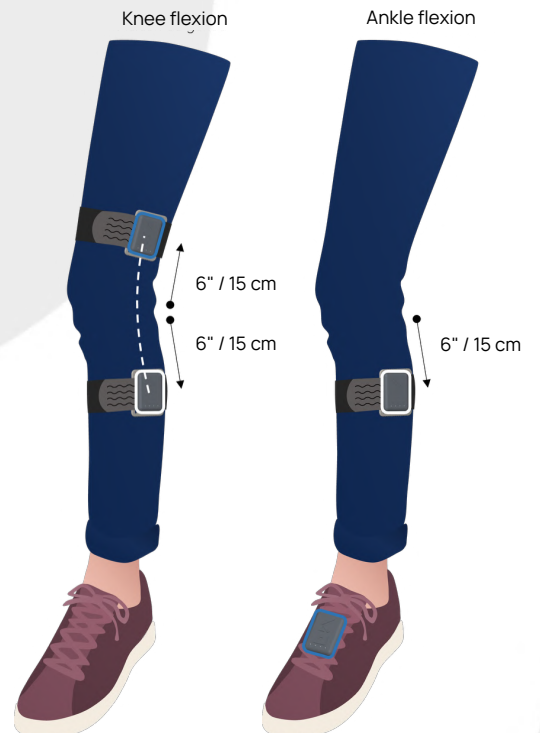
Repeat the operation around the calf



You can now place the REEV SENSE devices on the pods by aligning the magnets (Double-magnets & sensors LEDs shall face downwards)



The devices shall be aligned, parallel to the sagittal plane and placed 6"/15 cm above or under the knee. Misalignments will affect the quality of the acquisition



# REEV SENSE

## SHOE SET UP

To install the REEV SENSE device on shoes, you will need the shoe pod (see the 'SYSTEM OVERVIEW' section of this manual). Here is a guide on how to properly position and use it.

The solo magnet shall face the patient. Place it on the shoe and slide it toward the leg passing under the laces



Adjust the laces. Make sure the pod is secure, the magnets are not covered and the laces pass in between them



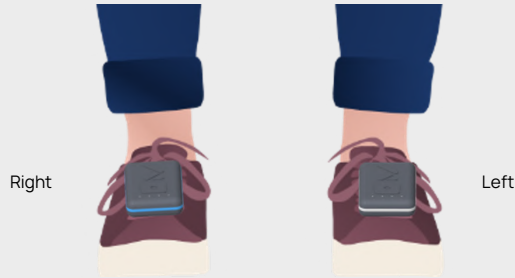
You can now place the REEV SENSE device on it by simply aligning the magnets (LEDs facing down)



Repeat these steps on the other foot



The devices shall be parallel to the sagittal plane. Misalignments will affect the quality of the acquisition



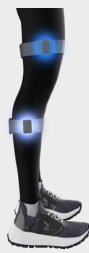
## SENSOR PLACEMENT

Make sure to respect the sensors color code and alignments.



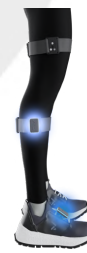
### Spatio-temporal

Place the blue sensor on the right foot and the white sensor on the left foot.



### Knee kinematics

Place the blue sensor on the thigh and the white sensor on the calf.



### Ankle kinematics

Place the blue sensor on the foot and the white sensor on the calf.

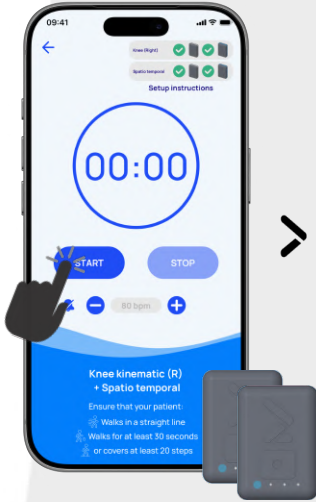
## PERFORM AND SAVE AN ACQUISITION

### START THE ANALYSIS

Once the patient is ready, the gait analysis can be performed.

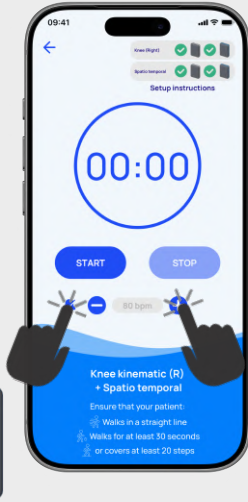
#### Check the test conditions

Read the bottom information and click on **START**



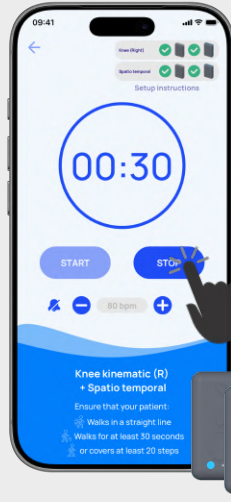
#### Metronome

You can activate a sound and set the speed (BPM) at which it emits regular beats



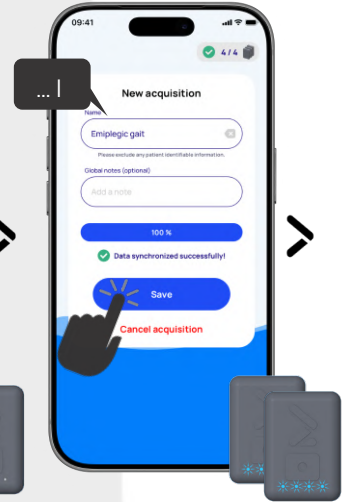
#### Acquisition run

Once the acquisition is complete, click on **STOP**



#### Data syncing

Fill in the results information and click on **Save**

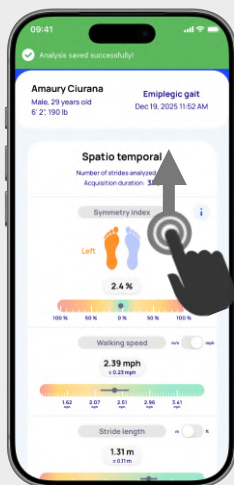


### SAVE THE RESULTS

The new analysis is saved into a results details item. Manage your results to add other analyses, add observations and edit related information.

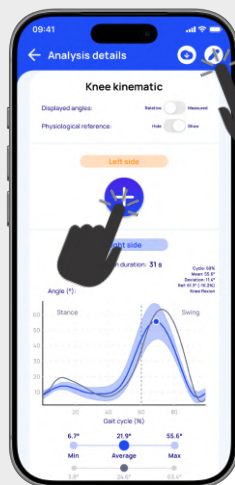
#### Results saved

Access and scroll through the data from the new acquisition



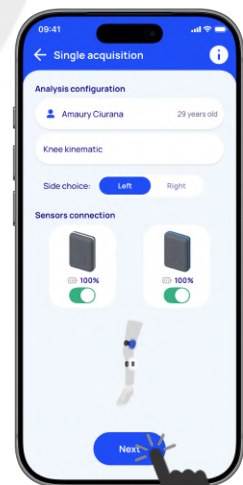
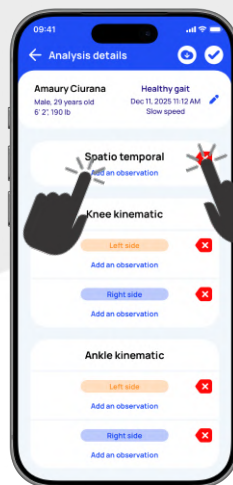
#### Manage results

Scroll to see details / click on + to add new analysis; Edit the results: click on the pen icon, and then add observations / delete the associated analysis



#### Add an analysis

The acquisition is pre-configured according to the selected analysis

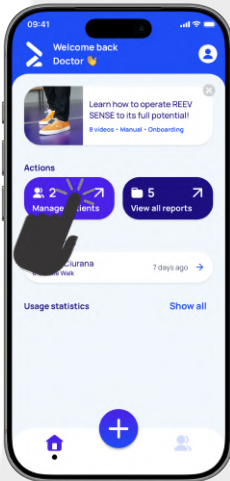


## MANAGE PATIENTS' RESULTS

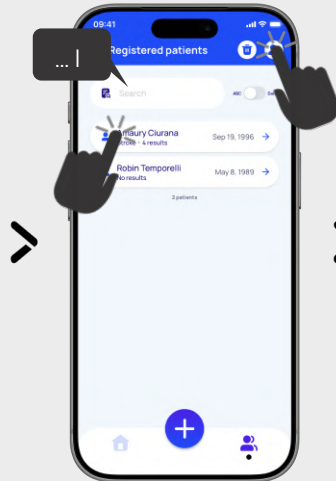
Here is the workflow to retrieve, sort, display, compare and export the results for a specific patient.

### RESULTS LIST

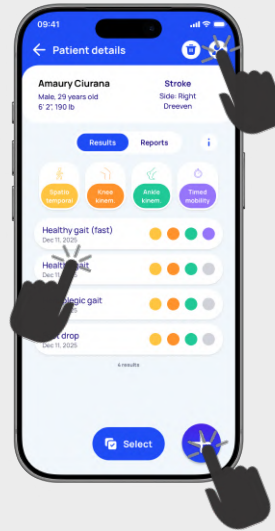
**Access to the patients list**  
From the Home screen, click on **Manage patients**



**Manage patients**  
Search/sort and select from the list; or click on **Add** icon to create a new patient



**Manage patient's results**  
Sort/select from the list; or click on + to create a new; or click on **Patient edit** icon

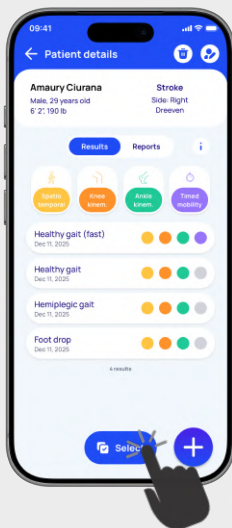


**Display a results item**  
The analysis details are displayed

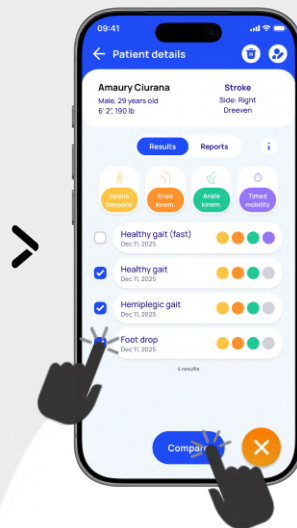


### RESULTS COMPARE

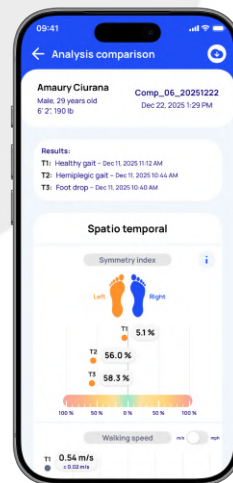
**Compare mode**  
From the list, click on **Select**



**Select results items**  
Select between 2-6 items and click on **Compare**



**Display results compare**  
The comparative analysis is displayed



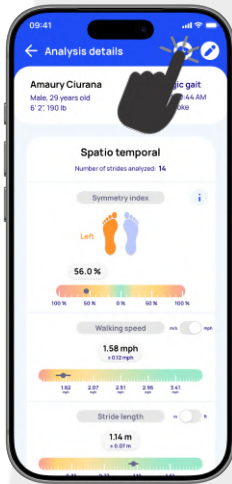
## EXPORT RESULTS AND MANAGE REPORTS

Here is the workflow to generate (unique or comparative) reports for a specific patient.

### GENERATE A REPORT

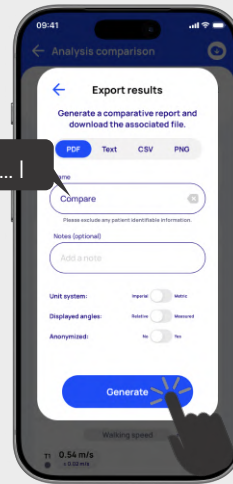
#### Export the results

From unique/compare results details screen, click on *Export* icon



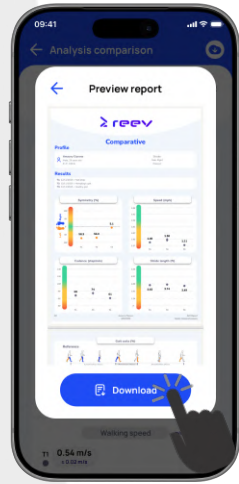
#### Export configuration

Select output format, adjust report information / options and click on **Generate**



#### Preview and download

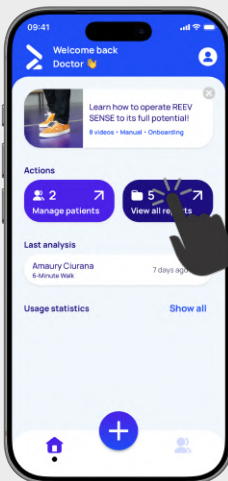
The report is generated and can be exported by clicking on **Download**



### REPORTS LIST

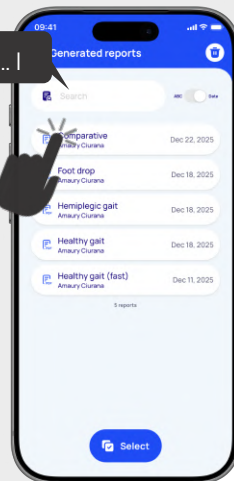
#### Access to the reports list

From the Home screen, click on **View all report** (or under Patient details **Reports** tab)



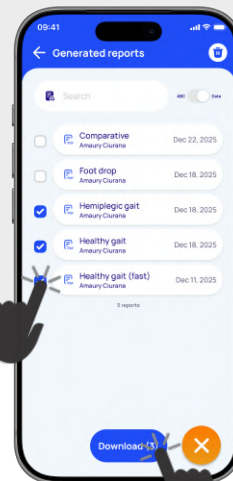
#### Manage reports

Search/sort and select from the list



#### Select reports items

Select from 1 to 100 items and click on **Download**



#### Batch download

The reports are exported into a ZIP file



# 11. DEVICE CONNECTION LOSS

During the acquisition, the patient might walk too far away from the application and cause a disconnection of the device, and a red cross will appear next to the device state indicator. To avoid data loss, the sensors can be reconnected to the application. This section presents the steps to follow in case of device disconnection during an acquisition.

## DEVICE RECONNECTION



If the device cannot be connected back, click on the *back* arrow to quit the acquisition; collected data will be lost.

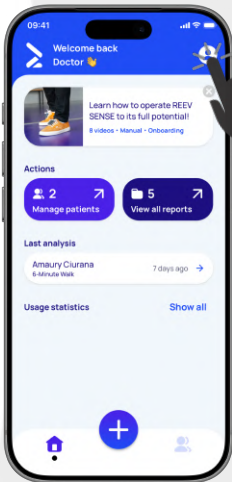
## 12. ACCOUNT MANAGEMENT

### PROFILE EDITION

The user can view or complete their profile, modify the password or delete the account. Click the *back* arrow to return home.

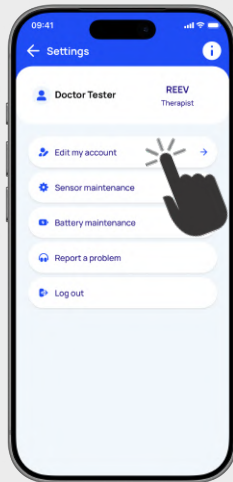
#### Access to the settings

From the Home screen, click on *Profile* icon



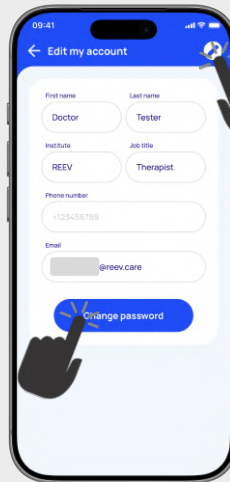
#### Settings menu

Select *Edit my account*



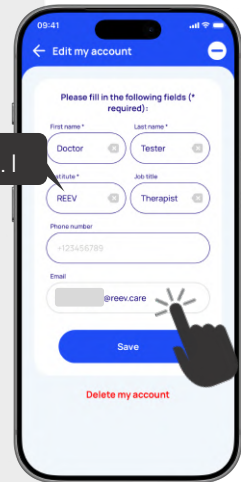
#### Profile information

Information is displayed. Click on *edit* icon; or click on **Change password**



#### Profile modification

Edit the user's details and click on **Save**

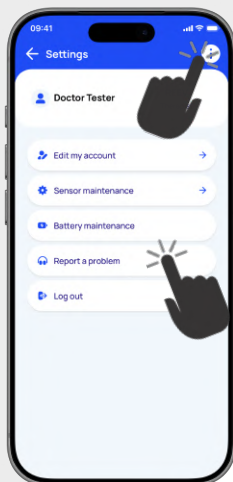


### CONTACT INFORMATION

The user can view REEV information and report an issue.

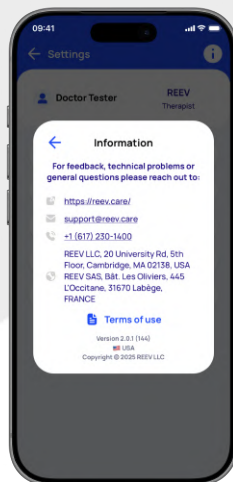
#### Settings menu

Click on *Info* icon; or Select *Report a problem*



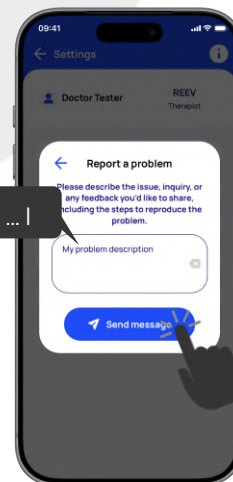
#### Application information

The contact and app information are displayed

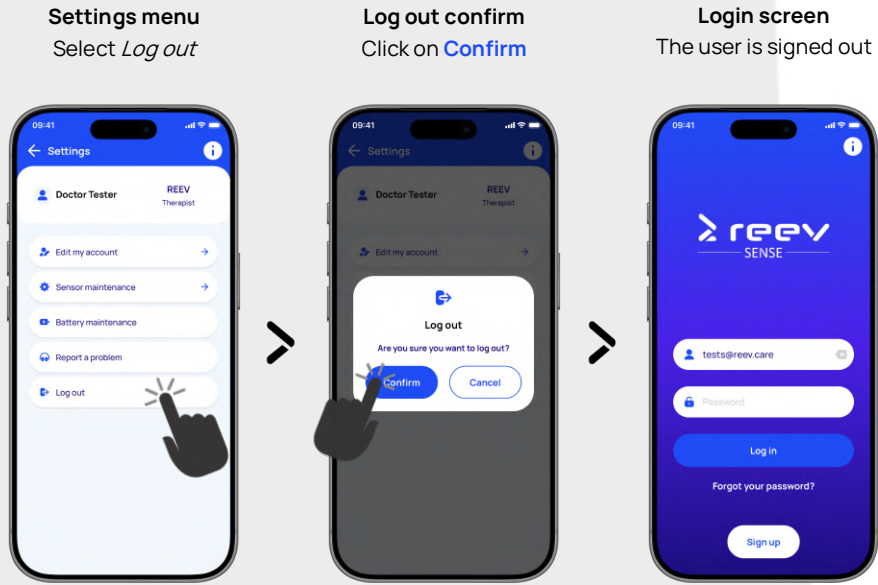


#### Report a problem

Enter the issue description and click on **Send message**



LOG OUT



13. BATTERY

CHARGING THE DEVICE

To charge the REEV SENSE device: connect the supplied USB-C cable to the USB-C port on the charging station; connect the other end to a computer USB port or to a power supply that meets the specifications listed below, then plug it into a power outlet. Place the REEV SENSE device on the charging station, respecting the alignment of the magnets. Two devices can be charged at the same time.

The charging station is equipped with non-slip pads. Therefore, it can be left stationary on any flat surface. It is possible to leave the charging station connected without using both devices' slots, regardless of the order of connection (you can place a device on the first or second station interchangeably). The charging station can be left plugged in without being used.



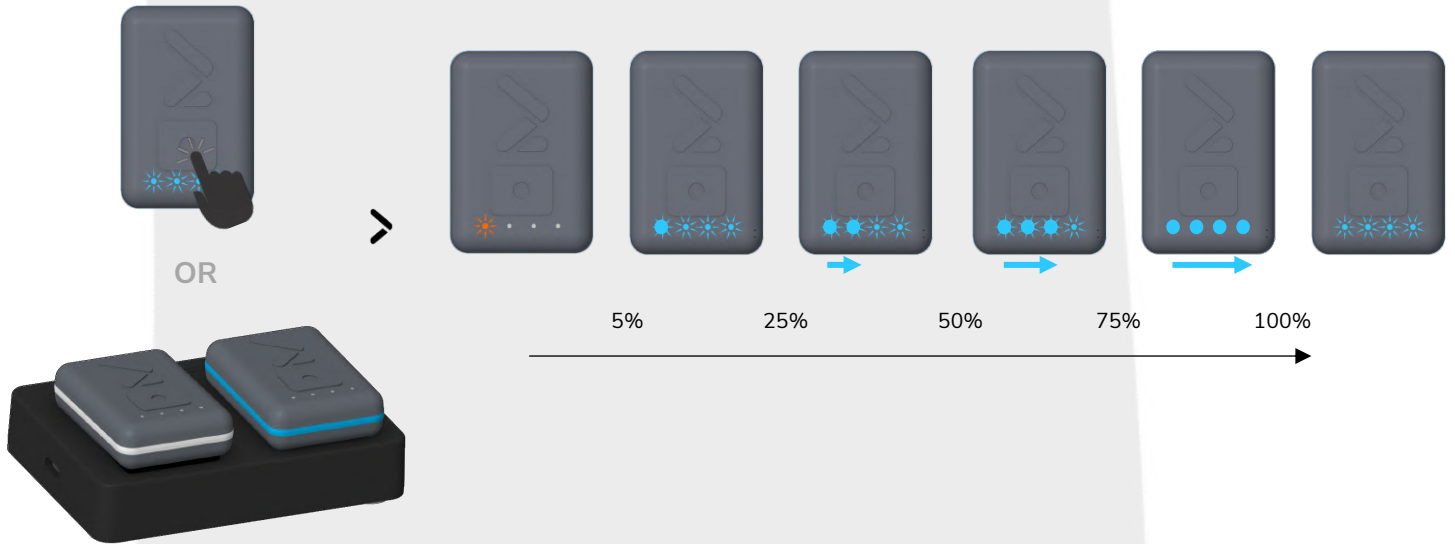
**Use only with power supply output limited to 15W/900J to supply the charging station.**

## REEV SENSE

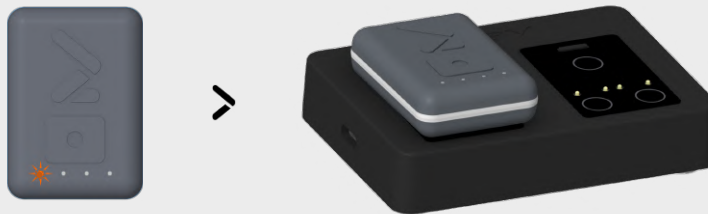
### BATTERY LEVEL INDICATION

When charging, the LEDs on the REEV SENSE device successively light up in blue to indicate the charging status. Once fully charged, all LEDs will turn off.

When the device is ON, the battery level can be checked by a short press on the main button.



If, at any time, the first LED rapidly blinks in orange, it indicates that battery is critically low (<5%) and the device needs to be charged.

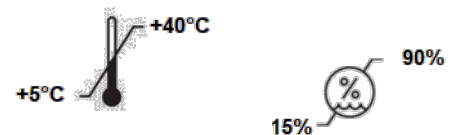


### CHARGING CONDITIONS

Power supply: 5V DC, 50/60Hz, 1A.

INPUT 5,0V  $\equiv \equiv \equiv$  1A  
OUTPUT 5,0V  $\equiv \equiv \equiv$  0,5A

- The device must be fully charged before first use.
- Use only between +5°C/+41°F and +40°C/+104°F.
- Use only between 15% and 90% humidity.





## 14. INSTALLATION AND MAINTENANCE

### CLEANING




Before cleaning the unit, make sure it is turned off and unplug all cables. Use soap and cold water to clean the sensor and its accessories. Carefully wipe all parts with a clean, dry cloth. The straps are hand washable.

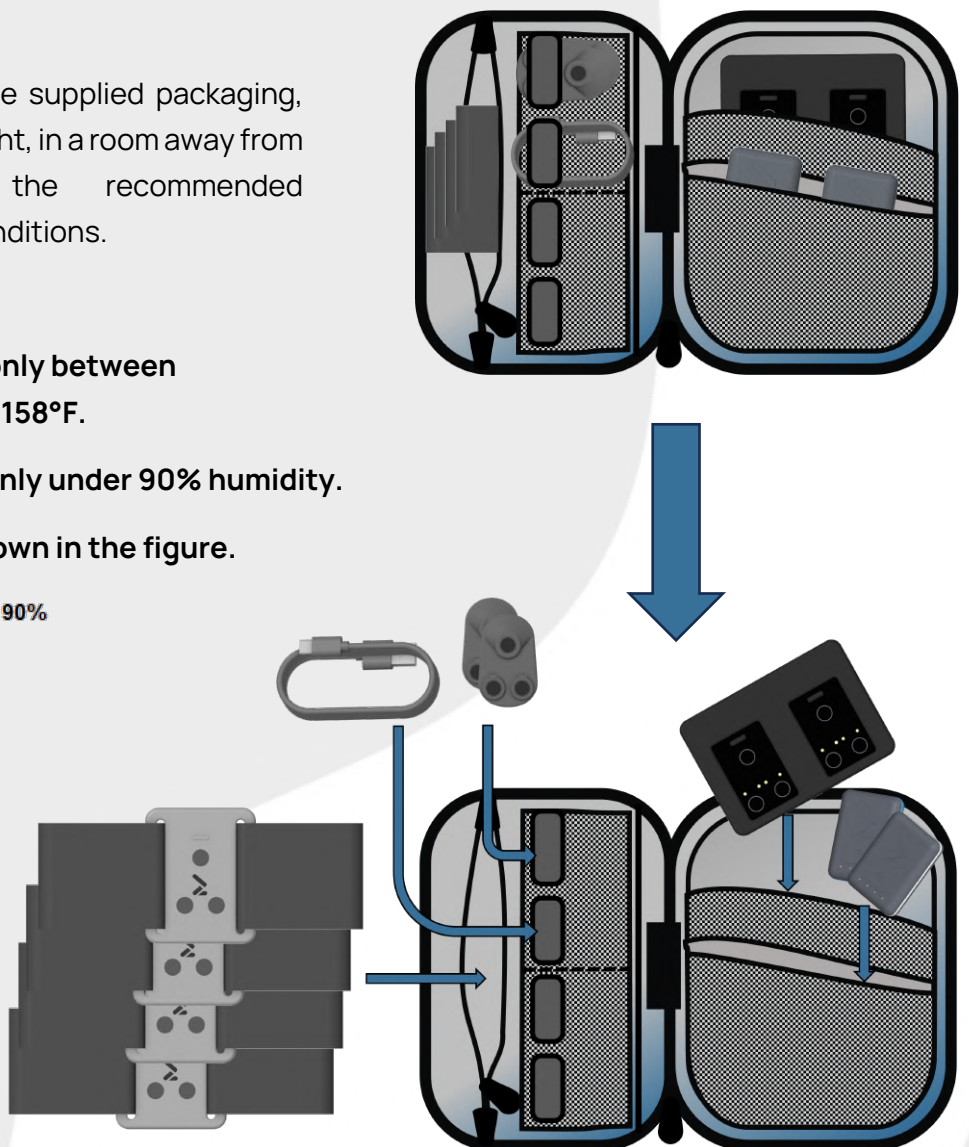
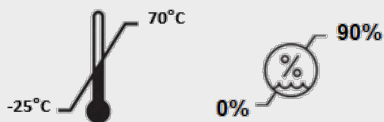
Do not clean the charging station.

-  Follow specified cleaning instructions.
-  Use only specified cleaning products.

### STORAGE

Store the device in the supplied packaging, organized as shown on the right, in a room away from direct sunlight within the recommended temperature and humidity conditions.

-  Store and/or transport only between  $-25^{\circ}\text{C}/-13^{\circ}\text{F}$  and  $+70^{\circ}\text{C}/+158^{\circ}\text{F}$ .
-  Store and/or transport only under 90% humidity.
-  Organize the pack as shown in the figure.



## 15. ELECTROMAGNETIC CONSIDERATIONS

Guidance and manufacturer's declaration – electromagnetic emissions		
<p>The REEV SENSE system is intended for use in the electromagnetic environment specified below. The customer or the user of the REEV SENSE system should assure that it is used in such an environment.</p>		
Emissions Test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The REEV SENSE system must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected.
RF emissions CISPR 11	Class B	The REEV SENSE system is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.

Immunity Test	IEC 60601 test level	REEV SENSE Compliance level
<p>The REEV SENSE system is intended for use in the electromagnetic environment specified below. The customer or the user of the REEV SENSE system should assure that it is used in such an environment.</p>		
Electrostatic discharge (ESD) IEC 64000-4-2	± 8 kV contact ± 15 kV air	± 8 kV contact ± 15 kV air
Electrical fast transient/burst IEC 61000-4-4	±2kV for power supply lines ±1kV for input/output lines	Not applicable, power supply not supplied with the product.
Surge IEC 61000-4-5	±1kV differential mode ±2kV common mode	Not applicable, power supply not supplied with the product
Voltage dips, short interruptions and voltage variations	< 5 % UT ( >95 % dip in UT) for 0,5 cycle	Not applicable, power supply not supplied with the product


## REEV SENSE

on power supply input lines IEC 61000-4-11	40 % UT (60 % dip in UT) for 5 cycles  70 % UT (30 % dip in UT)  For 25 cycles < 5 % UT ( >95 % dip in UT) for 5 sec	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m  50Hz or 60 Hz	30 A/m  50Hz or 60 Hz

## REEV SENSE

<b>Guidance and manufacturer's declaration – electromagnetic immunity</b>			
<p>The REEV SENSE system is intended for use in the electromagnetic environment specified below. The customer or the user of the REEV SENSE system should assure that it is used in such an environment.</p>			
Immunity Test	IEC 60601 test level	REEV SENSE Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6  Radiated RF IEC 61000-4-3	10 Vrms 150 kHz to 80 MHz  10 V/m 80 MHz to 2,5 GHz	N/A	<p>Portable and mobile RF communications equipment should be used no closer to any part of the REEV SENSE system, including cables than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p><b>Recommended separation distance</b></p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;"><math>d = 1.2\sqrt{P}</math></div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;"><math>d = 1.2\sqrt{P}</math> 80MHz to 800MHz</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;"><math>d = 2.3\sqrt{P}</math> 800MHz to 2.5GHz</div> <p>where <math>P</math> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <math>d</math> is the recommended</p>

## REEV SENSE

<b>Guidance and manufacturer's declaration – electromagnetic immunity</b>			
<p>The REEV SENSE system is intended for use in the electromagnetic environment specified below. The customer or the user of the REEV SENSE system should assure that it is used in such an environment.</p>			
<b>Immunity Test</b>	<b>IEC 60601 test level</b>	<b>REEV SENSE Compliance level</b>	<b>Electromagnetic environment - guidance</b>
			<p>separation distance in meters (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey should be less than the compliance level in each frequency range.</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p>
			
<p>NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p>NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p>			

**Recommended separation distances between portable and mobile RF communications equipment and the REEV SENSE System**

The REEV SENSE system is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the REEV SENSE system can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the REEV SENSE system as recommended below, according to the maximum output power of the communications.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d \approx 1.2 \sqrt{P}$	80 MHz to 800 MHz $d \approx 1.2 \sqrt{P}$	800 MHz to 2,5 GHz $d \approx 2.3 \sqrt{P}$
0,01	0.12	0.12	0.23
0,1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance  $d$  in meters

(m) can be estimated using the equation applicable to the frequency of the transmitter, where  $P$  is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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