

# **gense - mediscan Device**

## **Quick Start Guide**

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**gense**

## About gense - mediscan

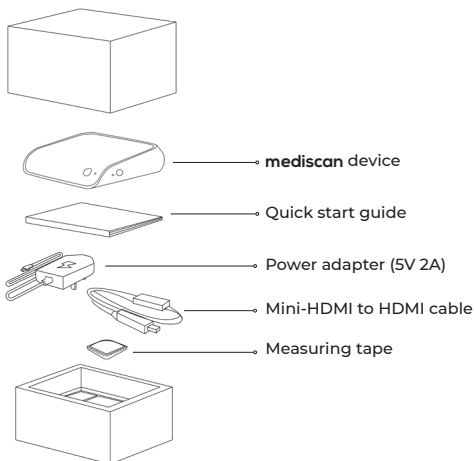
Gense offers an affordable and portable self-help medical imaging device for in-depth health monitoring and preventive screening at home and clinics. The device targets some of the costliest diseases' early detection and chronic disease monitoring, specifically in lung, liver, kidney and more.

### Note

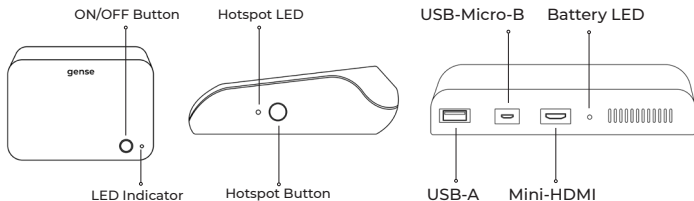
The Gense medical device is not intended for diagnosis. It is intended only as an adjunct in patient assessment. It must be used in conjunction with clinical signs and symptoms. Please consult your doctor for clinical diagnosis if needed.

## 01 Equipment Guide

### 1.1 What's in the belt box?



## mediscan device



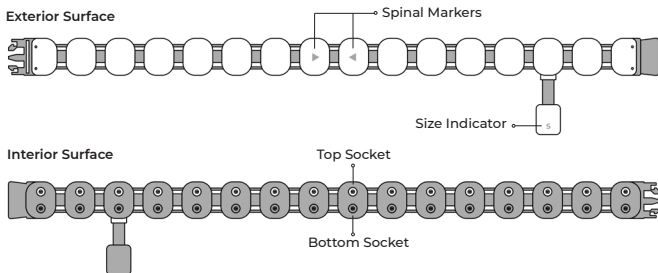
### mediscan device LED indications

ON/OFF Button/ ON/OFF LED	ON/OFF LED Status <ul style="list-style-type: none"><li>● <b>Blue:</b> Turned ON</li><li>○ No light: Turned OFF</li></ul>
Hotspot Button/ Hotspot LED	Connection LED Status <ul style="list-style-type: none"><li>● <b>Yellow:</b> device is updating</li><li>● <b>Red:</b> No connection</li><li>● <b>Blue:</b> Ready to use</li><li>● <b>Purple:</b> Connecting to Gense server</li><li>● <b>Green:</b> Paired connection</li><li>● <b>Green Flashing:</b> Data recording</li></ul>
Battery LED	Battery LED status <ul style="list-style-type: none"><li>● <b>Green:</b> Fully charged</li><li>● <b>Orange:</b> Charging</li><li>● <b>Red:</b> Lower power (please plug in the adapter for proper usage)</li></ul>

## 1.2 mediscan belt

mediscan belt x 3

Size	Circumference
S	65-80 cm
M	80-100 cm
L	100-115 cm

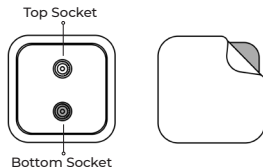


## 1.3 What's in the Electrode Box

**4 x 4 cm Gel Electrodes**  
(for mediscan belt - M & L size)

**4 x 3 cm Gel Electrodes**  
(for mediscan belt - S size)

(100pcs/ pack, for single-use only)



**\*Remark:** Snap the silver button to the "TOP" socket of the belt and snap the black button to the "BOTTOM" socket of the belt.

## 03 Safety Information for Use

- Do not use with a pacemaker or defibrillator.
- Do not use if you are pregnant.
- Do not perform measurements with broken device/belt/cable/electrodes.
- Do not place the electrodes on open wounds or scars.
- Do not wear the mediscan belt on peeling skin or sweaty body.
- Notice: Factors shown below may lead to wrong measurement



Belt worn incorrectly



Outdated biometrics



Wrong user profile



Defective/  
expired  
electrodes



Lose electrode  
contact during  
test



Unsuitable  
power adapter  
used



Sweat on skin



Dry skin



Scars

## 04 Setup for the Test

### 4.1 Download the “gense” Mobile app for free

Available on:

- Apple App Store (Device with IOS 9 or above)
- Google Play Store (Device with Android 9 or above)



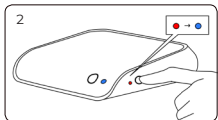
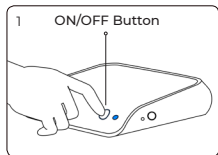
### 4.2 Get started with the “gense” app

#### 4.2.1 Create a new account (for first time users only)

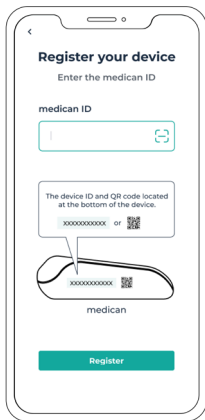
1. Sign up as a ‘general user’.
2. Register your account with a valid email address.
3. Set up a password for the new account.
4. An activation email will be sent to the registered email address. Click on the activation link embedded in the email to verify your account. (If you cannot find the activation link, click "Resend Verification Email" or search on the Junk Mail section.)
5. Return to gense app, fill in your personal information to complete the profile setup.

#### 4.2.2 Register the mediscan device

1. Make sure your environment is covered by a stable WiFi network.\*
2. Open gense app on your mobile device, navigate to Homepage, then tap on the Setup button on Device Setup to get started.
3. Turn on the device by pressing ON/OFF button (ON/OFF LED turns blue).
4. Wait about 1 minute until the Hotspot LED turns red.
5. Press and hold the Hotspot button until the Hotspot LED turns from red to blue.

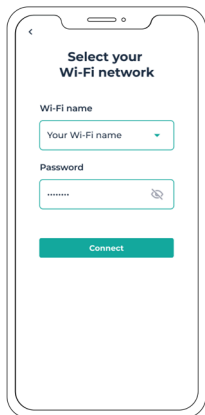
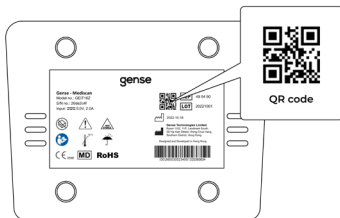


\*Remark: Incompatible with WiFi 6



6. To connect your device to Wi-Fi network, click on the "Next Button" to the "Register Your Device" page in.

7. Register the device by typing the device ID or scanning the QR code at the bottom of the device.



8. You will see the confirmation page after successful device registration. Then, tap on Next button and go to the Select Your WiFi Network page.

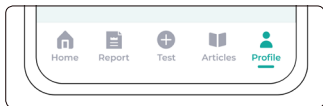
9. Select your Wi-Fi network by using a valid Wi-Fi name and password.

10. Check the Hotspot LED status.

- If the Hotspot LED turns green, the mediscan device is connected successfully. It is ready to start a test. Proceed to Session 4.2.3.
- If the Hotspot LED turns purple, wait until it turns green before starting the test.
- If the Hotspot LED turns red, repeat Step 5-9. If it still does not proceed,
  - Enter the name of your WiFi (SSID) and WiFi password.
  - Proceed to Session 4.2.3 when the Hotspot LED turns green.

### 4.2.3 Update your personal profile

1. Fill in the personal information and update your most recent biometrics accurately in the profile tab.



**Edit profile**

First name

Last name

Date of birth

Gender

Height  
 cm

Weight  
 kg

Chest circumference  
 cm

Waist circumference



## 05 Start the Test

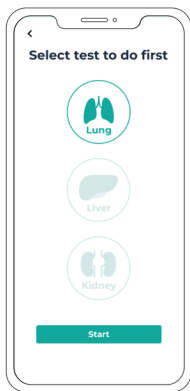
To get started with a mediscan test, click on "Test" tab on bottom menu bar and select the test you would like to perform.

1. Check the device list and select the correct mediscan device ID of your device (You can find the device ID at the bottom of the device). If your device is not listed, refer to Section 4.2.2, "Register the mediscan device".

2. Enter your chest or waist circumference, depends on which type of test you are carrying on. Chest or waist circumference, depends on which type of test you are carrying on.

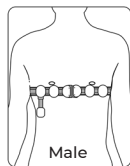
(Note: The position of belt placement depends on which type of test you are going to perform. It may be different according to different test type.)

3. Update your personal information if the presented information is incorrect.

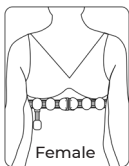


### Belt wearing position

#### Lung Test

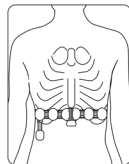


Below nipples



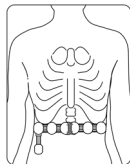
Under the edge  
of the bra

#### Liver Test



2 fingers above  
the lowest rib

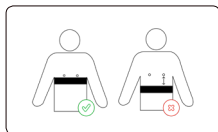
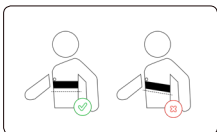
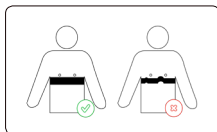
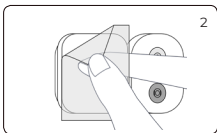
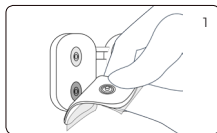
#### Kidney Test



Below the tip of  
the lowest rib

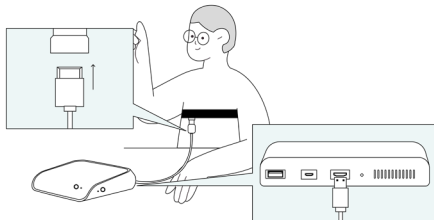
## Reminders for wearing mediscan belt

- Keep the belt in horizontal position and make sure the electrodes are attached completely on skin.
- Electrodes should be equally distanced and should not touch each other.
- Do not touch the electrodes with your hands.
- Electrodes are for single-use only. Do not reuse the electrodes.

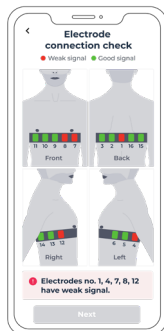
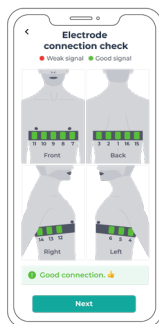


\*Belt-wearing instructions will be different due to lung, liver and kidney tests.  
Please refer to the gense-app for details.

4. Connect the mediscan belt to mediscan device with the provided Mini-HDMI to HDMI cable.



## 5. Proceed to the real-time 'Electrode connection check'.



If the electrode numberings are in green, the electrode receives good signals.

If the electrode numberings are in red, the electrode receives weak signals.

If receiving weak signals, do the following checks:

Possible issues leading to signal errors	How to adjust
Electrodes are folded or sticking to themselves or adjacent electrodes	Separate the electrodes and make sure they do not stick with each other before re-attaching them to the skin
Electrodes are loosely attached to your skin	Adjust or press the electrode until the entire electrode sticks firmly on the skin
Electrode is detached from the electrode socket holder on the belt	Reattach the electrode to the electrode socket on the belt
Incorrect orientation of electrode pad	Match the silver button to the top socket of the mediscan belt, and the black button to the bottom socket

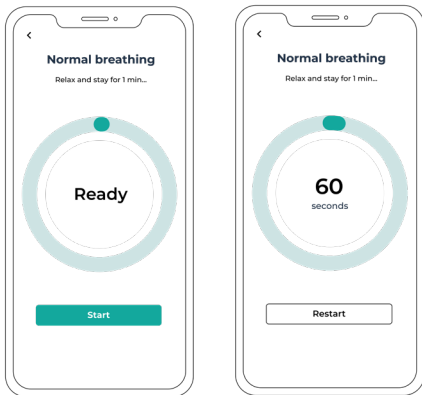
## 06 Perform the Test

Please read the corresponding test procedures for each targeted organ.  
(Note: Maintain a good posture throughout the test.)

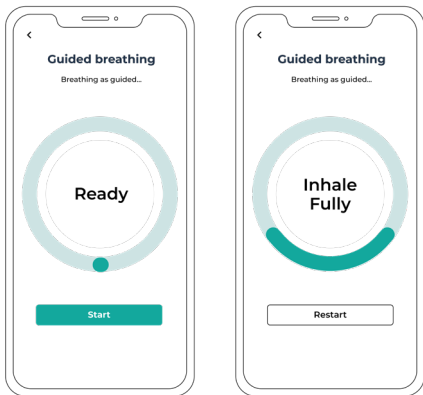
### 6.1 Lung Test Procedure

Complete the tasks as instructed:

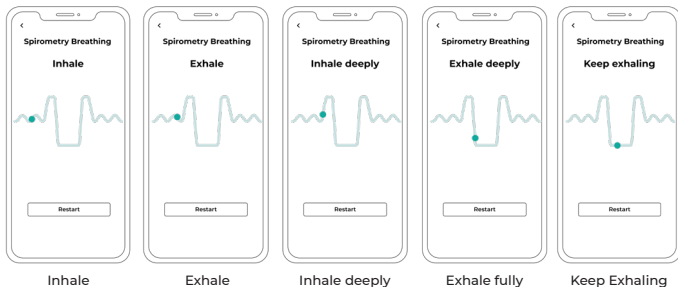
1. Normal breathing - Inhale and exhale for 1 minute.



2.Guided breathing - Inhale and exhale deeply with your mouth open as instructed on the gense-app.

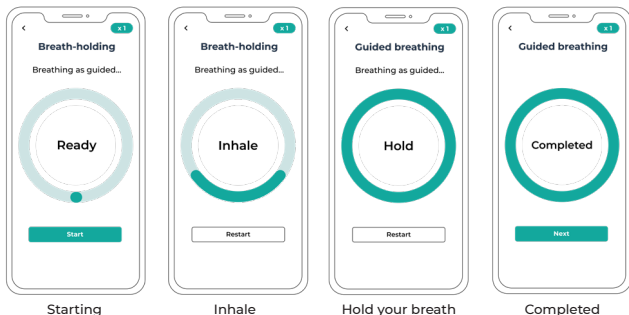


3. Spirometry breathing - Inhale deeply and exhale forcefully with an open mouth as instructed on the gense-app. Repeat 3 times to complete the lung test.



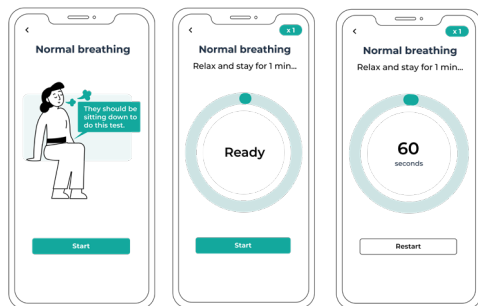
## 6.2 Liver Test Procedure

Breathe in for 3 seconds, hold your breath for 7 seconds, and then breathe out. Repeat 3 times to complete the liver test. You can re-do the test by clicking restart button if you find yourself did not perform the test properly.



## 6.3 Kidney Test Procedure

1. Sit, stay still and keep breathing normally for **3 rounds** of 1-minute kidney sessions to complete the kidney test.

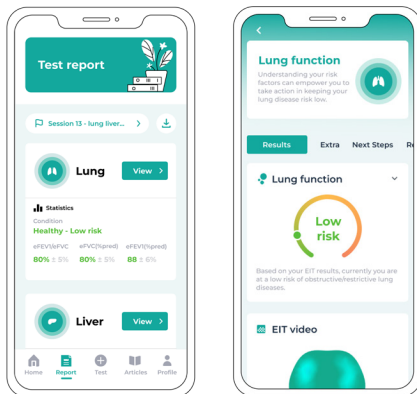


## 07 After Completing the Tests

1. Unplug the mediscan belt by removing the HDMI cable from the mediscan device.
2. Take off the mediscan belt from the body.
3. Remove all electrodes and dispose as general waste.

## 08 Find Your Results

After the test, you can view your results by clicking the "Report" tab. You can also generate a PDF report by clicking the "Get PDF Report" button. The report will be sent to your registered email address.



To view the detailed results of a test, click on the "View" button on the result page, you will find:

### Results

Find out your detailed test results including health condition, EIT video/image and health scores.

### Facts

Find out more about the facts and tips of the related diseases of the targeted organ.

### Recommendations

Access to condition-related healthy articles. The article search is powered by Gense's big data platform and personalised based on your body condition.

## General

### **Q. Who is not eligible to use the device?**

**A.** Individuals who meet one or more of the following criteria should not be examined using the mediscan device:

- Experienced any kind of recent surgery or transplantation on the designated areas.
- Has infected, inflamed, or damaged skin or open wounds or lesions on the designated area.
- Has implanted electronic devices.
- Has spinal diseases or discomfort
- Obese person with BMI > 35
- Has uncontrollable involuntary body movements caused by degenerative disorders (e.g. Alzheimer's and Parkinson's disease), seizure disorders (e.g. epilepsy, stroke, neuroleptic drugs) and neurological disorders (e.g. Tardive dyskinesia and cerebral palsy, tremors, myoclonus, tics, athetosis, etc.)
- Pregnant women
- Has skin allergies or hypersensitivity to adhesives.

### **Q. Who has access to my medical data and records?**

**A.** When the tests are done, the online medical reports will be generated and shared with you (user-specified healthcare provider) via a secured cloud platform. Personal data would not be disclosed to the public or given to a third party unless consent is given by the user or is required by law.



## **Belt Wearing**

### **Q. How do I place the belt correctly for the best results?**

- A.** Remove all articles of upper clothing and tie up loose strands of hair.
- Every electrode should be in contact with the designated area of the skin.
  - Wrap the belt straight and horizontally around the designated area, parallel to the ground.
  - Align the marked electrode to your spine, and make sure the cable port is facing downwards and is located on the front of your right-hand side.
  - Ensure that skin is clean and dry.
  - Ensure the adhesive of the electrodes contact the designated body area only.
  - Replace electrodes if the adhesive is torn, damaged, or no longer sticky.
  - Ensure the electrodes are not overlapped or folded.

## **Test Procedures**

### **Q. What should I do if the device disconnected in the middle of the test?**

- A.** You should check the colour of the Hotspot LED to interpret the connection status
- If the Hotspot LED turns purple, wait for the device to reconnect to the server. Restart the trial when the Hotspot LED turns green again.
  - If the Hotspot LED turns red, end the test and re-register the device again. Refer to step 7 in section 4.2.2 for procedures of device registration.
  - Ensure the electrodes are not overlapped or folded.

### **Q. What should I do when there is a “faulty electrode warning” in the middle of the test?**

- A.** The “faulty electrode warning” serves as a reminder of having loosely contacted electrode(s) during the test. Adjust the position(s) of the electrode(s) until the headline “Good to Go” appears which indicates well connection of electrodes.

### **Q. How could i restart the test if i perform a wrong paradigm or there is any misplacement of the belt?**

- A.** If any test (lung/ liver/ kidney) was carried out incorrectly, opt for "Retry Test" / "Restart" button before continuing to further sections of the test to collect the most accurate data.

## Results

### **Q. What can I learn from my results?**

**A.** You can find the risk assessments of your lung/ liver/ kidney health conditions. We show our EIT-based indicators benchmarked with standard clinical assessments (e.g. spirometry/ ultrasound elastography (fibroscan)/ standard blood test etc). We also provide standard classification rules of corresponding disease severities.

### **Q. What should I do if the Gense app shows that I have elevated risk (i.e., moderate or high risk) of disease?**

**A.** The mediscan device aims to provide a preventive screening test, it is not intended for solely diagnosis. Our screening test provide the assistance on early detection of lung, liver, kidney disease and more. Repeated testing in 1-3 months to determine and maintain your health status is recommended. Please consult your doctor for any medial diagnostic judgment.

### **Q. What should I do if I want to learn more about disease prevention?**

**A.** The "Facts" and "Recommendations" under the "Report" tab incorporates with factsheets and articles section providing general advices and recommendations. You can further understand your personal test results and make necessary lifestyle changes for improving your health conditions.

**\*Note** that the results are a health referencing tool that assesses your risk factors. The results can be used to infer biomarkers of your diseases but should not be interpreted as a diagnosis. Please consult healthcare professionals regarding medical or health-related diagnoses or treatment options.



For further information, please go to

**<https://www.gensetechnologies.com/support>**

Note: The version of the quick start guide might be updated, please follow the instructions based on the current guide version.

# **gense**

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