

gense mediscan™



Our company

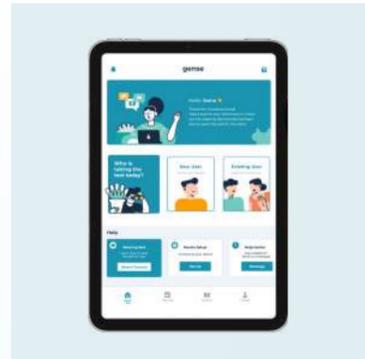
gense is composed of top talents from major universities globally and in Hong Kong. We have successfully developed the EIT portable imaging device with the aim of providing a portable, high-precision screening device that allows everyone to receive medical testing at home, community health centers, clinics and more, thereby improving the convenience and efficiency of health management.

Awards



Gense Technologies Ltd.
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1



Portable medical imaging device

2



Monitoring lung function, NAFLD¹ and CKD²

3



Easy to operate

4



Non-invasive and radiation-free

5



1-5 minutes per organ test

1. NAFLD: Non-Alcoholic Fatty Liver Disease

2. CKD: Chronic Kidney Disease

Lightweight and Portable Screening Device

The portable medical imaging device screens for lung function, fatty liver, and chronic kidney disease. It includes an electrode belt, console, and application software, and it's compactness is suitable for use at home, community health centers, clinics and more. The electrode belt comes in 3 sizes to accommodate users of all body types.

Benchmarked to Clinical Standards

gense collaborated with the University of Hong Kong to conduct ongoing research and clinical trials at Queen Mary Hospital. The research findings and clinical results have been published in international peer-reviewed journals such as Scientific Reports, IEEE, and NDT, validating the accuracy and reliability of mediscan.

Advanced Technology for Fast, Accurate Organ Screening

mediscan utilizes electrical impedance tomography (EIT), a non-invasive and radiation-free imaging technique, to measure electrical properties of body parts. By wearing the electrode belt to detect and transfer bio-signal to the console, with further cloud computation, health assessments of organs can be accurately done in 1-5 minutes.

Cutting-edge Technology with High Accuracy³

gense has established reliable algorithm models through clinical trials on both patients and healthy individuals. These models are used to calculate estimated clinical parameters of organs health. mediscan analyzes lung functions, NAFLD, and CKD risk that benchmarked with clinical standards.

Medical Electrical Safety Tested, Reliable to Use

mediscan™ is IEC 60601 accredited and produced by ISO 13485 manufacturer.

Detailed In-App Tutorial and Simple Testing Process



1. Wear the belt on the subject's corresponding position.

2. Follow instructions to complete the test.

3. Obtain an instant report upon completion of the test.

3. Our clinical trials showed 98% accuracy for pulmonary testing, and >75% accuracy for fatty liver and chronic kidney disease screening.

Product information

mediscan belt

-  3 sizes (S, M, L) for various body types
-  16 electrodes accurately target organs



mediscan™

-  4-hour battery life when fully charged
-  One-click internet access, simple and fast



Test report

-  Client profile
-  Test results
-  EIT image analysis
-  Data diagram
-  Data interpretation



Product Specification

Ambient Conditions

During operation

Temperature (device)	5 to 40 °C
Temperature (electrode belt and cables)	5 to 45 °C
Ambient pressure	80kPa to 106 kPa
Relative humidity	20 to 90 %, without condensation

During storage and transportation

Temperature	0 to 50 °C
Ambient pressure	500 to 1050 hPa
Relative humidity	20 to 90 % without condensation

Data Collection Settings

Frame rate	Up to 200 frames per second
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Performance Characteristics

EIT measurement

Number of electrodes	16 electrodes
Feed current amplitude	70 to 100 % of maximum patient auxiliary current conforming to IEC 60601-1 (3rd edition)
Feed current frequency	10 to 600kHz

Operating Rating

Mains supply

Mains supply nominal voltage and frequency range

Device: 5 V ± 10 %,

DCPower Plug: 100 to 240 V, 50/60 Hz

Mains power supply characteristics:	Mains supply must comply with clause 4.10.2 of IEC 60601-1 (3rd edition).
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Current consumption

Without charging	Max. 0.7A
With charging	Max. 1.3A

Power consumption

Maximum during operation	6.0 W
Typically during operation	Approx. 5.0 W
Maximum when device is switched off, but charging batteries	2.5 W

Internal Battery

Battery type	Lithium Polymer
Rated voltage	3.7 V
Rated capacity	3300 mAh
Charging time (fully discharged batteries)	Approx. 6 hours

Dimensions (W x H x D)

gense mediscan™ device	110 mm x 152 mm x 44 mm (4.33 in x 5.98 in x 1.73 in)
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Weight

gense mediscan™ device	<0.3 kg (0.66 lbs)
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Components and Accessories

gense mediscan™ device	Item No.: 4897126660043
gense-mediscan belt - S	Item No.: 4897126660050
gense-mediscan belt - M	Item No.: 4897126660036
gense-mediscan belt - L	Item No.: 4897126660067
gense EIT electrodes 4cm x 3cm	Item No.: 4897126660081
gense EIT electrodes 4cm x 4cm	Item No.: 4897126660074