How can you fight it,
if you can't measure it?

seca®
Precision for health

seca | mBCA

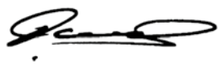
The beginning of a new era.

We have been developing and manufacturing precise measuring systems and scales of the highest quality since 1840. Today seca is the world market leader in the field of medical measuring systems and scales. Benchmarks are set when this experience and passion for precision meet body analysis. The result is the seca medical Body Composition Analyzer, or seca mBCA for short. Valid and precise data that can be used in the medical field. Extremely short analysis time. Easy use. Reliable and economical. Work even more efficiently, precisely, quickly and offer your patients more – starting now.

The seca mBCA. Insights from inside out.

Robert M. Vogel
CEO Marketing & Sales

Frederik Vogel
CEO Development & Manufacturing



Thomas Wessels
CEO Finance & Services

Your demands.

High time for a seca solution.

Identify symptoms earlier.
Several appointments and examinations are required in order to record the most important body composition parameters in a valid way. An analyzer that delivers these results in seconds would save you and your patients a lot of time. Valuable time that could have been used for the necessary treatment.

Support diagnosis.
In addition to height and weight, additional parameters such as fat mass, body water, and muscle mass will assist your diagnosis or recommendation for therapy. A body composition analyzer that delivers precise results and infographics would be the perfect support.

React to developments over the course of therapy.
Regular measurements are essential to react to certain developments over the course of therapy. You can react more precisely and in a more targeted way with a body composition analyzer that delivers valid and reproducible results and presents them in clear overviews of the course of therapy.

Optimise recovery time.
During rehabilitation it is important to monitor the effectiveness of specified measures and adapt them if necessary. A short measurement time, precise measurement data, and clear overviews of the course of therapy would support you in reducing the rehabilitation periods of your patients.

seca | mBCA

Developed for your daily work.

Intuitive operation.

The seca mBCA is easy to operate via the ample 8.4" touchscreen display. You can turn the display around 360° to have the best view at all times.

Short measurement time.

17 seconds – that's all the time that the seca mBCA needs. You can analyse and interpret the data immediately and therefore not lose any time in the diagnosis of your patient.

Impressive precision.

Medical precision of all measurement results validated on various ethnicities, reviewed in a clinical trial* using the respective gold standard method, and equipped with intelligent German measurement technology. When precision matters: seca mBCA.

Reliable measurement.

The handrail of the seca mBCA acts as a standing aid and provides a secure grip while the unique grip electrodes check contact for a reliable measurement. The hand position is predefined in order to obtain valid and reproducible results.

Extreme durability.

The weighing platform of the seca mBCA is made of safety glass. It can reliably and precisely weigh patients up to 300 kg. The low-to-the-ground design makes it easier to step on.

* Bosy-Westphal A, Schautz B, Later W. Kehayias JJ, Gallagher D. What makes a BIA equation unique?
Validity of eight-electrode multifrequency BIA to estimate body Composition in a healthy adult population. Eur J Clin Nutr 2013; 67: 14-21; doi:10.1038/ejcn.2012.160

Body composition analysis using the seca mBCA.

Take a deeper look into your patients.

An example from sports medicine:

Monitor physiotherapies.

A patient injures her achilles tendon and must refrain from all physical activities until her injury heals. As a result of her inactivity, her muscle mass decreases while her fat mass increases. Thus, changes such as these can be monitored by the seca mBCA.

An example from weight management:

Evaluate weight loss.

The overweight patient manages to lose a significant amount of weight in a short period. A measurement using the seca mBCA, however, shows that her fat mass has decreased only minimally but her muscle mass has decreased significantly. This indicates unhealthy weight loss and too little activity. Now you can actively counteract this.

An example from nephrology:

Check water distribution.

Chronic renal failure leads to water retention in the body. With the aid of the seca mBCA measurement you can more accurately determine the patient's dry weight as well as compare the patient's hydration status before and after dialysis.

An example from nutritional medicine:

Identify substance loss.

Cachexia, e.g. within the framework a tumour disease, manifests itself in a decrease of body cell mass. With the aid of the seca mBCA you can measure the cell mass at regular intervals in order to detect any decreases early and initiate any necessary nutritional therapies early enough.

Comfortable for everyone.
The ergonomic design of the seca mBCA helps everyone. It helps you and your co-workers because your patients do not have to be given time consuming instructions. It also helps your patients because they simply have to stand barefoot on the weighing platform without having to remove all of their clothing or wait for wires to be hooked up. The standing aid provides for a firm grip, while the low-to-the-ground design of the weighing platform allows patients to comfortably step onto it.

Save time analysing.

Quick to use and with quick results.

Every day you make difficult decisions under stressful situations. That is why we have developed a body composition analyzer that solves problems rather than creating them. We have ingeniously combined simplicity and speed in a way that has never been done before.

Ready for immediate use.
The seca mBCA saves you a lot of time learning how to use it. We have designed the analyzer in a way that enables intuitive use. With self-explanatory menus, logical arrangements, and clear symbols. Whether you are using the seca mBCA personally or performing a measurement together with your co-workers, its ease of use enables seamless integration into your daily workflow.

Extremely short measurement time.
Patients typically have to undergo time consuming examinations in order to provide you with clinically valid data. The seca mBCA drastically reduces the time required for this. 17 seconds are sufficient for the measurement to be completed. You can perform the measurement, form diagnoses with the aid of the data and start treatment immediately.

Optimally adaptable.
The seca mBCA offers a high degree of compatibility so that it adapts perfectly to your work environment. Whether using a USB stick, cable, or wireless data transmission, you can save and process all of the measurement data. With just a few clicks, you can transmit all results to your electronic medical record (EMR) system.

Clearly arranged and understandable.
Both the menu layout as well as the presentation of the results are clearly arranged and structured. The touchscreen display is simple and self-explanatory and gives you the option of printing out an easy-to-read one-page overview for your patient.

Precision.

Reliable for your services.

In your daily routine you need real facts that you can rely on. You are dealing with human health, after all. That is why we have developed a medical body analyzer that delivers precise results for the most important measurement parameters: the seca mBCA.

Clinically validated data.
The precision of the seca mBCA output parameters was validated across various ethnicities in a multicenter trial* using the respective most precise reference measurement method, also called the gold standard. For you, this means that you receive data that you can actually use and rely on.

Study:

Generation of Prediction Equations to Analyse Body Composition of Adults Based on Bioelectrical Impedance Analysis (BIA).

Prof. Dr. Manfred J. Müller, Head of the Department of Human Nutrition, Institute of Human Nutrition and Food Science, Kiel University, Kiel, Germany

Application and Adaption of Device Specific Body Composition Formulas to Various Ethnic Groups.

Prof. Dr. Dympna Gallagher, Head of the Department of Body Composition, New York Obesity Research Center, St. Luke's-Roosevelt Hospital, New York City, USA

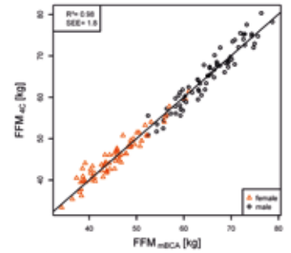
For more information on further studies, visit **www.seca.com/studies.**
Please contact us if you would like to view them. **Feel free to contact us.**

* Bosy-Westphal A, Schautz B, Later W, Kehayias JJ, Gallagher D, Müller MJ. What makes a BIA equation unique? Validity of eight-electrode multifrequency BIA to estimate body composition in a healthy adult population. Eur J Clin Nutr 2013; 67: 14-21; doi:10.1038/ejcn.2012.160

A study* has provided impressive proof:

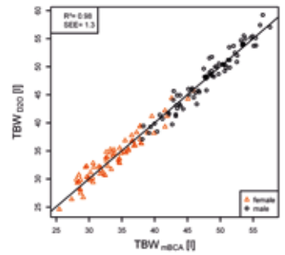
The seca mBCA is comparable to the respective gold standards.

Fat-free mass.
The fat-free mass (FFM) was validated using the 4-compartment model (4C model). Only the 4C model takes into account the biological variability of the water and mineral content. Other methods such as DEXA can only partly estimate this, which can lead to less precision – particularly among thin and athletic patients. The fat-free mass (FFM) correlates to over 98 % (R^2 = 0.98) with the 4C model.

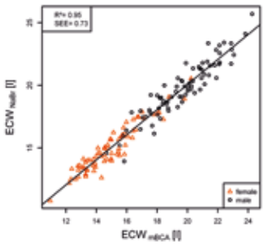


Fat-free mass measurement comparison between the seca mBCA and the 4C model

Total body water.
In order to obtain a medically precise determination of body water it is necessary to make use of dilution methods that require time-consuming evaluation in the laboratory. The total body water (TBW) correlates to over 98 % (R^2 = 0.98) with deuterium dilution (D_2O dilution) while the extracellular water (ECW) correlates to over 94 % (R^2 = 0.94) with the sodium bromide dilution (NaBr dilution).

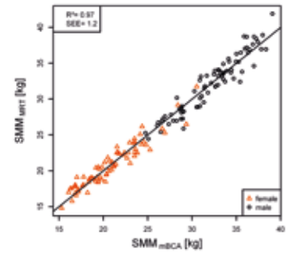


Total body water measurement comparison between the seca mBCA and D_2O dilution



Extracellular water measurement comparison between the seca mBCA and NaBr dilution

Muscle mass.
Over 250 full-body MRI scans are evaluated in total. It is a time-intensive yet very thorough approach that cannot be achieved with things such as DEXA technology (which merely shows pixels in 2D). The result is that the muscle mass correlates to over 97 % (R^2 = 0.97) with magnetic resonance imaging (MRI).

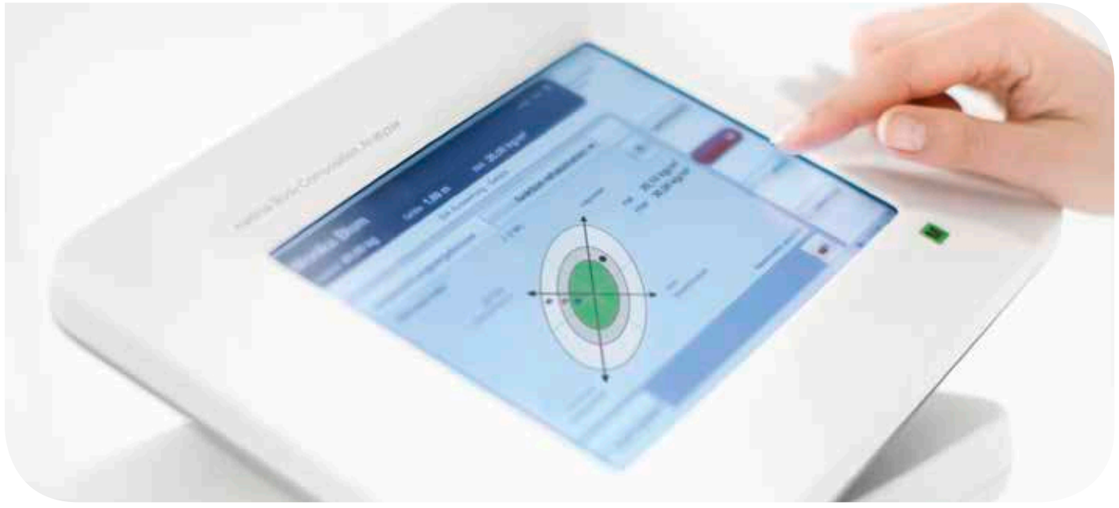


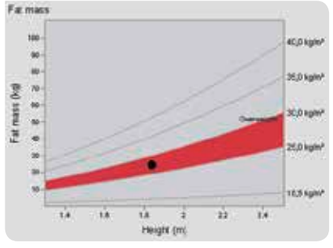
Muscle mass measurement comparison between seca mBCA and MRI

The touchscreen display.

Intuitive to use and easy to understand.

The seca mBCA can be operated effortlessly using the touchscreen display. The intuitive menus are designed in such a way that you and your coworkers do not require any time consuming training. Simply turn on the analyzer, turn the display to the desired position, and start the measurement. You will then receive the measurement results broken down into the following most important parameters.



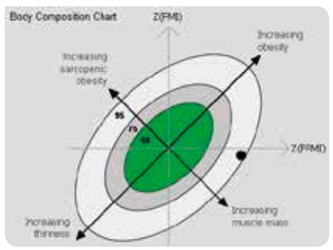


Fat mass / fat-free mass

The medically precise distinction between fat mass and fat-free mass is especially important when weight changes occur. This is especially true for patients that are overweight, obese and malnourished.

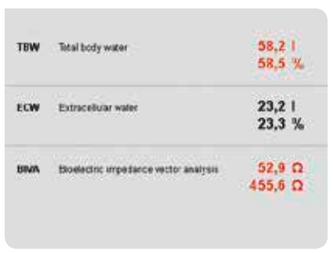
Skeletal muscle mass

The development and retention of skeletal muscle mass plays an important role in malnourished patients, in the area of sports medicine, and in the reduction of body weight. The display shows the individual values for each of the patients' extremities as well as their torso.



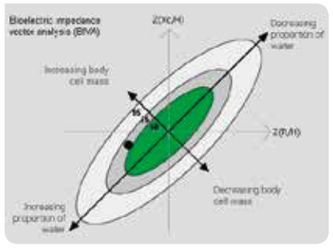
Body Composition Chart (BCC)

The BCC displays fat mass and fat-free mass in a graphic which enables you to interpret body composition at a glance. In addition, a series of measurements can be used to determine whether the fat mass or fat-free mass contributed to any weight change.



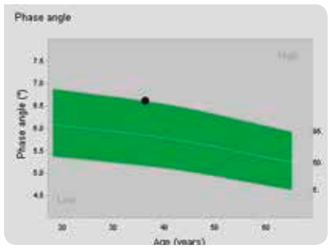
Body water

Total body water, intracellular water, and extracellular water are measured separately. This supports the determination of dry weight, the detection of oedemas, improved evaluation of weight loss, and the diagnosis of dehydration.



Bioelectrical impedance vector analysis (BIVA)

Information on fluid status and body cell mass is presented in a graphic. You can thereby better evaluate the hydration status as well as the nutritional status and fitness. The BIVA is essential for nutrition counselling, sports medicine and nephrology.



Phase angle

The phase angle is correlated with the nutritional and metabolic status. Small irregularities in the somatic cells can be detected early and the severity of cancer, heart disease, and HIV can be verifiably determined. With the phase angle, signs of fatigue can be identified earlier in primary care and sports medicine.

Visceral fat

The higher the visceral fat value, the higher the risk of cardiometabolic illnesses. With the seca mBCA, negative trends can be detected early in order to initiate corresponding treatments and therapies.

The PC software.

Full performance, full control.

The seca mBCA can do a lot. You will also receive the seca analytics 115 PC software so that you can exploit its full potential. For it is only with this comprehensive tool that you can follow the course of development of your patient's values across multiple measurements. And the software offers even more.

- **Display courses of therapy and control therapies.**
  Save the results of regular measurements and observe how certain measurement values of your patient develop over the course of time. This will enable you to monitor the success of therapy or respond to unexpected developments.

- **Compatible with your system.**
  Transfer data smoothly to your EMR via PDF, CSV file, GDT, HL7, or XML format.

- **Choose how you want to save the data.**
  Each workstation has its own requirements. You can therefore transfer seca mBCA data via USB stick, cable, or wireless data transmission.

- **One seca mBCA for multiple workstations.**
  With additional software licenses you can access the measurement results of a single seca mBCA from multiple PCs.

- **Quick access to patient data.**
  Quickly upload patient data to the seca mBCA – enter it directly using the touchscreen display, upload it from your PC or via a barcode scanner connected to the USB port.

The printable overview.

Easy to explain and even easier to understand.

With so much information, a clear and understandable overview helps. Simplify your work and print out an understandable analysis overview with a click. One-page for your patient, a great timesaver for you.

seca solutions.

Perfectly co-ordinated to one another.

seca mBCA 515
Technical specifications

- Capacity: 300 kg
- Division: 50 g < 150 kg > 100 g
- Approval class: (III)
- Medical device class: IIa
- Dimensions (W×H×D): 976 × 1,251 × 828 mm
- Display type: 8.4" touch-screen display, can be rotated 360°
- Interfaces: seca 360° wireless, USB 2.0, Ethernet
- Measurement method: 8-point Bioelectrical Impedance Analysis
- Measurement current: 100 µA
- Measurement time, normal mode: 17 seconds
- Frequencies: 19

PC Software seca analytics 115
System requirements

- Supported operating systems: Windows® 8.1, Windows® 8, Windows® Server 2012 R2, Windows® Server 2012, Windows® 7 (SP1), Windows® Vista (SP1, SP2), Windows® Server 2008 R2 and Windows® Server 2008
- Ports: For use with seca USB 2.0 or serial interface (RS232) devices
- Required available hard disk space: at least 1 GB
- Required available memory: at least 512 MB RAM
- Monitor: 1024 × 768, high color (16-bit), 32-bit (recommended)
- Peripherals: DVD drive
- Processor: 1.2 GHz or higher

1 exclusive location license included with the purchase of a seca mBCA 515

Demonstration and offer.

Feel free to contact us.

Let your seca contact demonstrate the seca mBCA to you personally. Familiarise yourself with the options and get answers to your questions. Fill out the form below completely and e-mail or fax it to your seca contact.

Free product demonstration

☐ **Yes,** I would like a free no obligation live personal demonstration of the seca mBCA at my place of work.

No obligation offer

☐ **Yes,** please send me a free no obligation personal offer for _____ (number) seca mBCA.

Clinical studies

☐ **Yes,** please send me the mBCA studies.

Other

☐ **Yes,** please contact me regarding _____.

Fax **0121 633 3403**

E-mail **info.uk@seca.com**

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City, Postcode

Phone

E-mail

I prefer to be contacted: ☐ by phone ☐ by e-mail

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