Medical Measuring Systems and Scales since 1840

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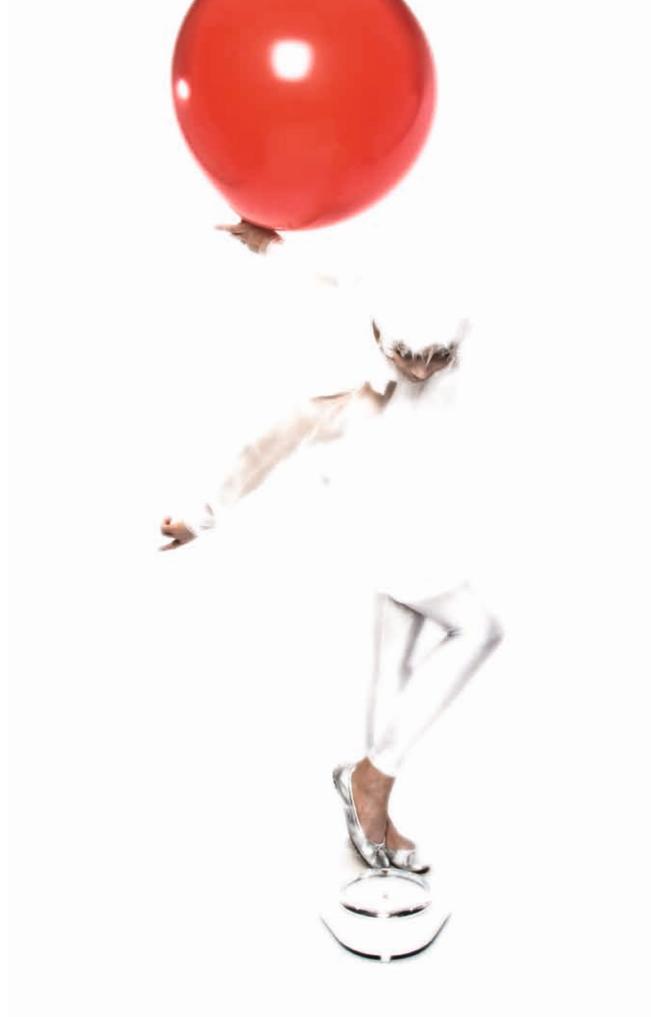
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All contact data under www.seca.com





Every question helps us improve.

For more information on products and the seca Service, please call:

+49 40 20 00 00 0

Of course, you can also find answers to your questions online at:

www.seca.com

An innovation its worth

Doctors, nurses and other health care professionals value technology that supports them in their day-to-day work and helps them save time. Our products help to shorten routine procedures and prevent errors. The intuitive control systems save training time, while the high level of reliability and quality guarantees precise measurements every time. Our effective, global seca service network also contributes to this. Mobile or stationary, little or plenty of space, for constant or only

is something that proves in day-to-day work.

occasional use – we offer the right products for a wide range of conditions and requirements. The key factor, however, is that every seca product forms part of a system solution. This is the only way to ensure that devices can be fully integrated, processes networked and the number of work steps reduced.

Our products are sold exclusively through specialist retailers. This guarantees the level of reliability and service that you expect from us.



Robert M. Vogel

CEO Sales & Marketing

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CEO Development & Manufacturing

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Thomas Wessels
CEO Finance & Services

Best-fit products by medical area of application











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secalinnovations



08 seca mBCA medical Body Composition Analyzer 16 seca 360° wireless the world's first wireless product system 42 seca 285
wireless measuring station
for height and weight

70 seca 677
wireless wheelchair
scales with handrail and
transport castors



Accurate patient consultation

requires reliable data.

Exact body composition

The medical Body Composition Analyzer (mBCA) from seca divides the weight into the important components for medical use: fat, muscle mass and water.

Health and nutritional status

Important indicators of severe illnesses such as obesity, malnutrition and diabetes can now be detected, faster and more precisely than ever before.



Courses of therapy

The PC software can be used to document courses of therapy and give patients a clear printout for their records.



Comprehensive analysis

The six modules of the seca mBCA 515 offer countless diagnostic options and present the results using clear graphs.

Medically valid

The seca mBCA 515 is validated against the medical science gold standard – using clinical studies* developed at clinics in the USA and Germany. This enables doctors and medical staff to work at the cutting edge of science.



*At press time, not all studies have been published.

For current publication status:

www.seca.com/studies

seca | mBCA

Where BMI ends, the seca medical Body Composition Analyzer begins.

Size and weight alone are not enough for a more extensive analysis of a patient's body composition. What about fat, muscle and water content? All of these are important indicators of serious diseases. This is exactly why seca has developed a medical Body Composition Analyzer, which delivers all these values and has been validated against the medical science gold standard. Thus, it is possible to precisely and medically determine values such as fat mass, extracellular and intracellular water, and skeletal muscle mass. Put simply, the seca mBCA is an innovative diagnostic instrument that will give your facility a unique advantage.

With five decisive advantages for medicine

- Medically precise measurements.
- Assessment of the general health and nutritional status of the patient.
- Brief examination less than 20 seconds.
- Early indicators of various diseases.
- Exact monitoring of courses of therapy.

08 •

Simplified work, quick measurement and medically relevant results,

that is the seca mBCA 515.

he seca mBCA 515 is a medical Body Composition Analyzer, which is ideally adapted to the working conditions in hospitals and medical practices. After all, in order to obtain a truly meaningful BIA measurement (bioelectrical impedance analysis), we need to look beyond the many technical requirements. For one thing, the device has to be quick and easy to use for both medical staff and patients. For another, the measurement results have to be reproducible under normal clinical working conditions. These exact considerations went into the development of the seca mBCA 515.





seca mBCA 515

Technical data

- Capacity: 300 kg
- Division: 50 g
- Approval class: (III)
- Dimensions (WxHxD):
 976 x 1,251 x 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: max. 20 seconds
- Frequencies: 19

System compatible with:

360° wireless USB adapter seca 456, seca analytics 115 software, seca 274 stadiometer or seca 264

seca | service

For seca mBCA 515:

- On-site seca mBCA installation service including seca network configuration
- On-site seca mBCA maintenance service



The data and measurements are sent via an Ethernet or wireless connection to the PC software, which then integrates them into the Electronic Medical Record (EMR) system via the internal network.



Hand-held electrodes prevent measurement errors and ensure that results are always reproducible.



The large, easy-access, fastcleaning, safety glass weighing platform is suitable for use by patients weighing up to 300 kg.

Six times more for every measurement.

With the six modules in the seca mBCA 515.

he six analytical modules of the new seca mBCA 515 offer the user innumerable diagnostic options. With precise ratios such as fat mass to weight or extracellular to intracellular water, the doctor can now obtain indications of medical disorders which were previously difficult to diagnose without additional examinations. Another significant advantage comes with the graphic presentation of measurement results, which visualizes the doctor's findings for the patient.



Energy

ian en iarrei Se se

Fluid

Function/Rehabilitation

Health risk

Development/Growth Raw impedance data



The fat mass is the human body's energy store. The module not only shows the fat mass both as an absolute value and relative to the patient's body weight; it also indicates the energy stored in the body.

- Fat mass (FM/%FM)
- Energy stores in body
- Resting energy expenditure (REE)
- Total energy expenditure (TEE)

Street to a second seco

The Fluid module determines total body water and its makeup in terms of extracellular and intracellular water. If the proportion of extracellular water is too high, that could indicate that the patient is retaining more water than is healthy. With the help of the Bioelectrical Impedance Vector Analysis (BIVA), the patient's fluid status can be presented in easy-to-understand graphics.

- Total body water (TBW)
- Extracellular water (ECW)
- Hydration (HYD) = Extracellular water (ECW)/intracellular water (ICW)
- Bioelectrical Impedance Vector Analysis (BIVA)



The module Function/Rehabilitation determines the patient's level of fitness, metabolic activity and any training progress. The Body Composition Chart (BCC) developed by seca depicts the measurement points of the fat mass indices over a coordinate system and helps to determine body composition.

- Fat-free mass (FFM)
- Fat mass (FM/%FM)
- Fat mass indices (FFMI/FMI)
- Skeletal muscle mass (SMM)

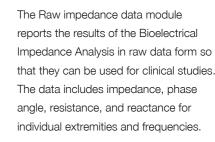
A prognosis for the patient's general health and nutritional status can be made with the Health risk module. The decisive factor is the phase angle, from which conclusions can be drawn about the condition of the body's cells or the entire organism. This evaluation is shown in the BIVA. The module also determines fat mass index (FMI) and fat-free mass index (FFMI) and plots them in the BCC.

- Phase angle (φ)
- Hydration (HYD) = Extracellular water (ECW)/intracellular water (ICW)
- Bioelectrical Impedance Vector Analysis (BIVA)
- Fat mass indices (FFMI/FMI)



The module Development/Growth allows monitoring of changes in weight, as the patient's weight, height and BMI are graphically presented for each measurement.

- Weight (W)
- Height (H)
- Body Mass Index (BMI)



- Impedance (Z)
- Phase angle (φ)
- Resistance (R)
- Reactance (Xc)

Examination results are only as valuable as the analysis performed.

The seca analytics 115 PC software.

More in-depth analysis

The seca analytics 115 PC software does more than simply uploading the examination results from the seca mBCA to your PC. It expands on them significantly, for instance with a module for cardio-metabolic risk or a therapy planner.

seca 360° wireless

The measurements from the seca mBCA 515 and other seca 360° wireless products can be received wirelessly by a PC running seca analytics 115.

Digital patient files

Only EMR-integrated products such as seca analytics 115 can convert the data into the format required to process it in the Electronic Medical Record (EMR) systems.

Solid scientific foundation

The seca mBCA 515 and the seca analytics 115 PC software use the latest scientific references for the analysis and interpretation of the measurements.

With six decisive advantages for medicine

- Sets up the PC so that it can wirelessly receive the measurements of the seca mBCA and other seca 360° wireless devices.
- Also, offers the Cardiometabolic risk module, the extension to the Raw impedance data module, additional interpretation options, trend curves and the therapy planner.
- Gan generate and print out clear graphs for all data either for patient records or to provide a clear structure for patient consultation.

- Stores all patient and examination data in a central seca database.
- 5 Enables clinics to take the first step toward digital patient records with EMR integration.
- With the necessary security, thanks to simple user account management and access rights.





The additional module Cardiometabolic risk compares BMI and waist circumference to reference values, calculates the 10-year risk of coronary heart disease and checks whether a metabolic syndrome is present.



The seven modules for the analysis of examination results can be compiled for each patient as needed and presented in an easy-to-read PDF document. This patient printout is not only intended for patient records – it is also a valuable aid for clear patient consultation.



Trend curves document and monitor data such as the proportion of fat mass.



The therapy planner helps in the analysis of resting and total energy expenditure. It is becoming increasingly important, as more and more patients are suffering from malnutrition, overweight or obesity.

seca | service

For seca analytics 115:

- Remote or on-site installation service
- Remote or on-site EMR integration service
- Remote or on-site software support



seca | 360° wireless

A new era in measuring and weighing!

magine – data wirelessly transmitted and then printed or received by a PC and analyzed by software that compares them to standard values. All measurements can be transmitted directly into the Patient Data Management System of a hospital or doctor's practice and managed there. seca 360° wireless not only saves valuable time and prevents manual entry errors, but also provides doctors and staff with a whole new level of information about abnormal health and nutritional statuses among their patients.

With seven decisive advantages for medicine

- Wireless communication instead of cable connections.
- 2 System components can be set up anywhere.
- seca's own secure wireless protocol for simple and fast recognition of devices in the seca 360° wireless network.
- Paperless and error-free transmission of measurements.

- seca analytics 115 PC software for diagnostic assistance based on highly qualified analysis and assessment of the health and nutritional status of the patient.
- Graphic presentation of measurements and their comparison to standard values – PDF or hard copy print-out.
- Software seca emr flash 101 for direct transmission of measurements to any EMR system.

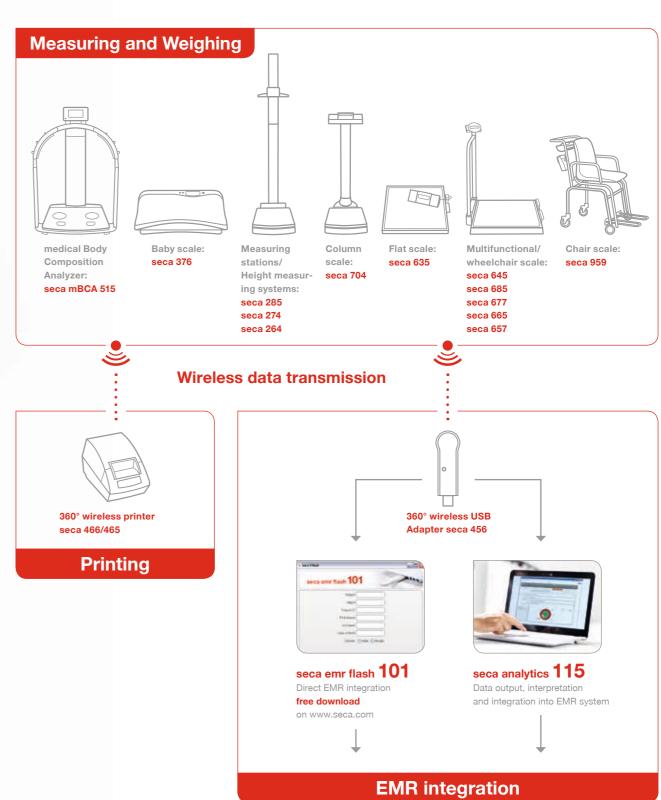
One step ahead of the future:

direct EMR integration.



he wireless product system seca 360° wireless is the first of its kind in the world. Our products transmit their data as required via a special medical wireless protocol to a simple, fast and secure seca network. Within seconds, measurements are transmitted wirelessly and assigned to the correct patient ID in your EMR system, or transferred to a seca 360° wireless printer. This increased efficiency allows your facility to concentrate on what's really important — the well-being of your patients.

360



The future belongs to networks –

in medicine too.

f many experts join hands, they will work faster and more efficiently. That is the idea behind a network, and the same applies to the seca 360° wireless network with the seca analytics 115 PC software for diagnostic support (or the seca emr flash 101 software for connecting seca 360° wireless products

ing systems and scales are spread across several rooms, and can work wirelessly with any number of PCs. With seca analytics 115, the user can access the data of an EMR system via a central interface (seca EMR Connector), store height and weight measurements

directly to the EMR system, see page 22). Here, the seca height measur-

as a PDF. This saves time not only in measuring procedures,

and export the other analysis data from seca analytics 115

but in the documentation as well.

Treatment room with seca 285 measuring station and PC with seca analytics 115



Measuring and weighing in one step. With seca analytics 115, all the measurement results are made available on the network straight after the examination.

Treatment room with seca 704 column scales, seca 274 stadiometer and PC with seca analytics 115



More time for what really matters: receive the measurement results from several seca products on one central PC.

EMR integration

The seca database can be stored on the central server.

Higher quality consultation: the seca analytics 115 PC software compares the results with the standard values and presents them clearly.

Doctor's office with PC

and seca analytics 115

PC in reception with seca analytics 115



Store the patient data in the EMR and transfer them to the seca analytics 115 PC software.

Treatment room with seca 376 baby scales and seca 466 printer



No manual transfer required: simply send the measurements to the seca 360° wireless printer for immediate printing.

Our seamless integration

into any EMR system.

any devices bear the label "EMR-ready", but in practice that isn't enough. Only EMR-integrated products like seca emr flash 101 and seca analytics 115 permit direct integration of data in an EMR system and bring the data to internationally recognized standards (e.g. HL 7 or GDT), which the EMR system requires for processing purposes. The only prerequisite is the USB adapter seca 456 for the PC, so it can receive the measurements from seca 360° wireless products.



360°





EMR-integrated

- Direct integration of data into any EMR system
- Standard international formats such as HL7 and GDT
- Includes an API for individual module development
- Time savings, for precise work without manual entry errors
- Leaves more time for what really matters: the patient's well-being

seca emr flash 101 for direct EMR integration

A direct connection to an Electronic Medical Record (EMR) system normally involves a lot of programming work. Not with secal With the software seca emr flash 101, available as a free download from the Internet site www.seca.com, seca offers two options for direct integration into the EMR system:

- 1. An Application Programming
 Interface (API) that permits
 customized module development
 in simple programming steps for
 the specific EMR system.
- 2. Software modules have already been developed by seca for some EMR systems (e.g. Allscripts Professional) and standard protocols (e.g. HL7, GDT) in which about 80% of the programming steps have already been executed. For the integration in hospitals or doctors' practices, all that is needed is some support from the EMR system provider or IT department.

seca analytics 115 can do more than analyze and interpret data

With the PC software seca analytics 115 doctors can work with the data from seca products on a PC and make significant improvements in the quality of the examination. They can also export the results to an EMR system and import patient data as well. In addition, it is possible to create an electronic report and store it digitally as a PDF in the patient files.



Pediatric scales and measuring systems

Exact measurements: as important to life as the air we breathe.

That is why seca offers everything that makes it easy for doctors and nurses to measure and weigh infants – from a mobile measuring mat to a head circumference tape, and baby scales with a damping function that ensures reliable measurements despite movements.

Baby scales

Babies who feel safe and secure are easier to weigh.

B aby scales by seca make weighing fast and comfortable, thanks to the skin-friendly materials that immediately take on and radiate body warmth. With designs that make the baby feel safe and advanced functions that shorten the weighing process. The seca 360° wireless technology allows you transmit weight measurements quickly and securely without cable connections to a PC or printer.



seca **757**

Electronic baby scale with integrated RS232 interface (III)

A special integrated damping system together with the HOLD function for quick, precise weighing even if the baby is restless. The ergonomically shaped tray with high rounded sides makes it easy to weigh larger babies. The large, bright LED figures make it easy and convenient to read the result. Power supply is by power adapter or rechargeable batteries. An integrated RS232 interface guarantees the reliable transmission of data to a PC.

- Capacity: 15 kg
- Graduation: 5 g
- Functions: TARE, HOLD, automatic switch-off, RS232 interface
- Optional: interface cable seca 451

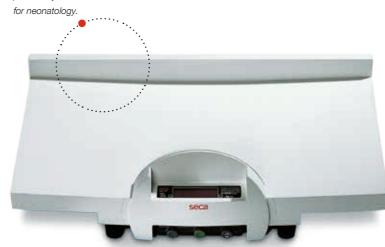


The damping function delivers precise measurements even if the baby moves.



Can be operated by rechargeable batteries or power adapter.

Maximum precision makes this scale particularly suitable



seca **717**

Electronic baby scale with fine graduation (III)

Thanks to the especially fine two-gram graduation, this scale registers even the smallest change in weight. With the aid of the HOLD function, the result is displayed even after the baby has been taken off the scale – a baby can therefore first be attended to before its weight is noted. Power supply is by power adapter.

- Capacity: 15 kg
- Graduation: 2 g < 6 kg > 5 g
- Functions: TARE, HOLD, weighing range switch-over, automatic switch-off
- Optional: measuring rod seca 231, head and foot positioners seca 429

seca added value

Baby scales with integrated measuring rod for measuring and weighing in one step? There is such a thing – from seca of course. Supplemented by the measuring rod seca 231, the electronic baby scale seca 717 becomes a complete measuring and weighing system that can be operated easily with just one hand. The other hand remains free to keep the baby still in the weighing tray.

Accessories

seca **231**

Measuring rod for baby scale seca 717

This measuring rod converts the baby scales seca 717 into a complete weighing and measuring system. You can measure and weigh the baby on the scales and thus save time. It is easy to mount on the scales with the perfectly fitting connections.

- Measuring range: 35-80 cm
- Graduation: 1 mm



The optional measuring rod allows measuring and weighing in one step.





Wireless baby scales with extra large weighing tray (III)

Ergonomic, convenient and time-saving: these are the key words that define the seca 376. Its extra large tray lets you weigh a seated toddler of up to 20 kg, even if the child is fidgety. The adjustable damping function combined with the auto-HOLD function ensures fast and precise work. Net weight of a diapered baby? Choose TARE. The amount of milk breastfed to a baby? Use the BMIF (Breast-Milk-Intake-Function). Measuring and weighing in one step? Yes - thanks to the optional measuring rod seca 233. Transmit the weight measurement wirelessly to the seca 360° wireless network? Just press SEND. You can do it from any location because the seca 376 is operated by batteries, so there's no need for electrical outlets.

- Capacity: 20 kg
- Graduation: 5 g < 7.5 kg > 10 g
- Functions: TARE, BMIF, HOLD, auto-HOLD, auto-CLEAR, weighing range switch-over, damping, automatic switch-off, SEND/PRINT
- Optional: measuring rod seca 233, head and foot positioners seca 418, power adapter seca 447, switch-mode power adapter seca 400
- RS232 compatible



System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101

seca I service

For seca 376:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support



High sides on weighing tray offer special protection from falling out.



With seca 360° wireless technology and the press of a key, the seca 376 can send every measurement to a seca wireless printer or to software seca analytics 115 on the PC.



Power supplied by batteries for mobile use.

Accessories

seca **233**

Measuring rod for baby scale seca 376

The measuring rod seca 233 with integrated head and foot positioner turns the seca 376 into a complete measuring and weighing system. A single time-saving step for measuring and weighing is made possible by the easy assembly and effortless read-out of results.

- Measuring range: 35-80 cm
- Graduation: 1 mm

Accessories

seca 418

Head and foot positioner for seca 376

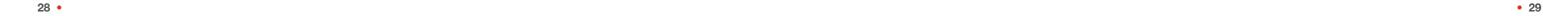
Easy and convenient: the head and foot positioner seca 418 can easily be attached to the baby scale seca 376. This accessory increases safety by securing baby at head and feet. Integrated handles also make it easier to transport the seca 376.

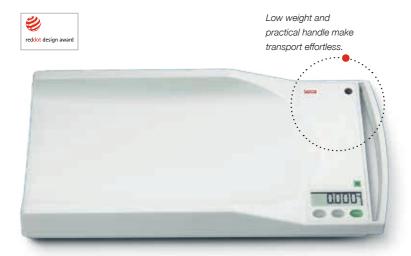


The optional measuring rod allows simultaneous weighing and height measurement.



Head and foot positioners can be easily adjusted for all-around security





Mobile electronic baby scale (III)

The battery-operated scale with large, easy-to-read LCD display combine innovative technology with space-saving design. Due to its low weight and integrated handle (can also be used for hanging the scale), it is easy to transport and is quickly ready for use anywhere. The optional measuring rod seca 232 allows measuring and weighing in one step.

- · Capacity: 15 kg
- Graduation: 10 g
- Functions: TARE, HOLD, automatic switch-off
- Optional: measuring rod seca 232, head positioner seca 419, power adapter seca 447, switch-mode power adapter seca 400, carrying case seca 428



Accessories

seca **428**

Carrying case for seca baby scales

The baby scale seca 336 can be safely and efficiently transported in this customized carrying case of water-repellent material equipped with a shoulder strap and practical padding.

Accessories

seca **232**

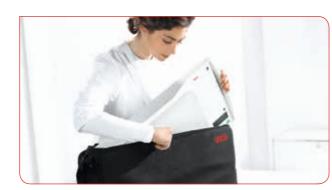
Measuring rod for baby scale 336

Just as easy to fit as it is to read. This baby measuring rod with integrated head and foot positioner makes the seca 336 even more efficient because now weighing and measuring can be done in one step.

- Measuring range: 35-80 cm
- Graduation: 1 mm



The optional measuring rod allows measuring and weighing in one step.



The baby scale can be easily stored and transported.



seca **385** seca **384**

Electronic baby scale with fine graduation, also usable as flat scale for children (III)

Two scales in one: the seca 385 and seca 384 baby scales with a comfortable weighing tray. In no time at all, it can be converted into a floor scale for children with a capacity of 50 kg (seca 385) or 20 kg (seca 384). The weighing tray and the base which serves as the floor scale are securely locked together, thus ensuring that the baby can be weighed absolutely safely. A further advantage of the scale is its Breast-Milk-Intake-Function which determines how much milk the baby has consumed. The robust but lightweight scale is easy to transport; self-explanatory buttons make it easy to operate.

seca 385

- Capacity: 50 kg
- Graduation: 20 g < 20 kg > 50 g
- Functions: TARE, BMIF, HOLD, weighing range switch-over, automatic switch-off
- Optional: measuring board seca 417, carrying case seca 414 (for combination with measuring board) and seca 413

seca 384

- Capacity: 20 kg
- Graduation: 10 g < 10 kg > 20 g
- Functions: TARE, BMIF, HOLD, weighing range switch-over, automatic switch-off
- Optional: measuring board seca 417, carrying case seca 414 (for combination with measuring board) and seca 413

eca added value

Baby scales that can also weigh toddlers? There is such a thing – from seca of course. The high capacity of the seca 385 lets you weigh toddlers and children. Simply remove and set aside the weighing tray for babies and the scale is ready for heavier loads of up to 50 kilograms.



The weighing tray can be removed quickly and easily at the touch of a button.





Electronic baby and child scale with high capacity and double use (III)

With its dual function, this baby scale are a small sensation: at the touch of a button, the tray can be detached quickly and easily from the base, leaving you with robust flat scales for children weighing up to 20 kg. As the two elements are securely connected, it is absolutely safe to lift and transport the scales. The softly rounded shape of the tray gives the baby a feeling of safety and security. The Breast-Milk-Intake-Function shows the exact amount of milk the baby has consumed.

- Capacity: 20 kg
- Graduation: 10 g < 10 kg > 20 g
- Functions: TARE, BMIF, HOLD, weighing range switch-over, automatic switch-off
- Optional: measuring board seca 417, carrying case seca 414 (for combination with measuring board) and seca 413



Thanks to the removable weighing tray, even toddlers up to 20 kilograms can be weighed.



Accessories

seca **413**

Carrying case for baby scale seca 385, seca 384 or seca 834

With this case, baby scale seca 385, seca 384 or seca 834 can be transported comfortably and safely. The exact fit of the seca 413 provides optimum protection and the large opening facilitates the packing and unpacking of the scales. An adjustable shoulder strap makes transport easier and the water-repellent nylon surface keeps everything dry.



seca **745**

To simplify cleaning, weighing tray can be removed.

Mechanical baby scale with sliding weights (III)

This model combines classic design with high-quality precision mechanics. Determining an exact weight is child's play, thanks to the smooth movement of precise sliders. The gently curved weighing tray keeps the baby safe during every step of the weighing process. The resetting function that puts the scale back to zero lets the user reliably determine net weight. Before the baby is weighed, the weight of soft padding in the tray or of the baby's diaper can be deducted from the gross weight with use of the reset-to-zero function. The impact-resistant and scratchproof finish makes it easy to care for the seca 745 and contributes to the scale's guaranteed long service life.

- Capacity: 16 kg
- Graduation: 10 g
- Functions: reset-to-zero function



The reset-to-zero function guarantees reliable determination of net weight by simply deducting the extra weight of padding or diaper.



Pediatric measuring systems

Adaptable devices are preferred.

linics, medical practices and health care facilities have varied conditions and requirements. seca responds with a wide range of products for pediatrics – from the infantometer to measuring mat and from measuring rods to the head circumference measuring tape. seca has the right solution for every application, whether the devices are for in-patient or mobile use, in large or small spaces, for everyday or infrequent use. They all share the renowned seca quality which always lives up to the most demanding medical requirements.



The unique V-shape automatically places the baby in the right measuring position.

seca **416**

Infantometer for measuring babies and toddlers in hospital

The sturdy construction and stability of the infantometer makes it quick and easy to measure babies and toddlers up to two years old. The board is generously designed and the raised and softly rounded sides guide the baby easily and safely into the right position. Permanently mounted with rollers on two guide rails, the footpiece slides smoothly along the scale. Because the footpiece is lockable, the baby can be removed and the result noted later. All parts are tough and durable.

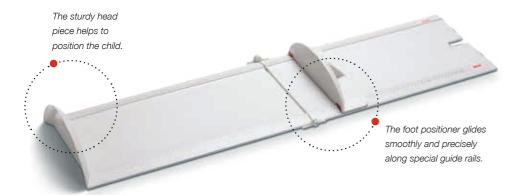
- Measuring range: 33-100 cm
- Graduation: 1 mm

seca added value

An infantometer with a lock-in-place footpiece?
There is such a thing – from seca of course.
The footpiece on the infantometer seca 416 smoothly slides into position, but cannot be displaced by baby's stomping feet. With the footpiece firmly in place, you can simply measure and read the results. No more readjustments made necessary by a restless baby.



The foot positioner locks into place to capture results.



Light, space saving and stable measuring board also ideal for mobile use

The seca 417's fold-up mechanism and low weight make it compact and easy to transport. For all that, the removable foot stop is securely guided along rails. The measuring board is simple to use and, thanks to its smooth surface, easy to clean. Durability and a long service life are guaranteed by high-quality materials.

- Measuring range: 10–100 cm
- Graduation: 1 mm
- Optional: baby scales seca 385, seca 384 and seca 834, carrying case seca 414 (for combination with baby scales) and seca 412



The high-quality folding mechanism guarantees a long service life.



The measurement results are easy to read from the large scale.



Accessories

seca 412

Carrying case for measuring board seca 417

Thanks to its folding mechanism, the mobile measuring board can be stored away compactly and easily transported in this tailor-made carrying case. The robust finish and the durable, water-repellent surface make the bag an indispensable accessory for measuring board seca 417.

Possible combination

seca 385/384/834, seca 417 and seca 414

The mobile measuring and weighing system for babies and toddlers

Easy-to-use, space-saving, mobile: the mobile measuring and weighing system by seca. To weigh and measure babies and toddlers in a lying position, with double-use baby scale seca 385, seca 384 or seca 834 and the measuring board seca 417.

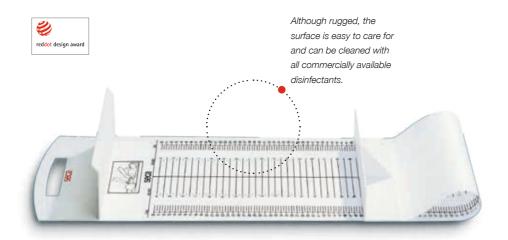
Packed in the carrying case seca 414 for simple, lightweight and convenient transport.

A scale on each side

permits measuring of

head circumference

and facial symmetry.



seca **210**

Mobile measuring mat for babies and toddlers

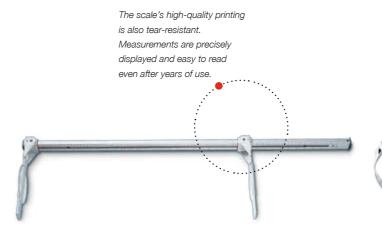
The seca 210 is a lightweight and space-saving solution for precise measurement of the length of babies and toddlers while lying down. While kind to the skin, the 210 is washable and foldable. The fixed head piece and the sliding foot positioner make it simple to use.

- Measuring range: 10-99 cm
- Graduation: 5 mm



The measuring mat can be rolled up for space-saving storage.





seca **212**

Measuring tape for head circumference of babies and toddlers

The measuring tape is made of non-stretch Teflon synthetic material and measures both the head circumference (front side) and the symmetry of the face (reverse side). A practical dispenser (containing 15 tapes) ensures that they are stored safely.

- Measuring range: 5-59 cm
- Graduation: 1 mm

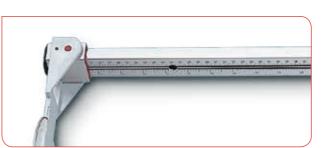
seca **207**

Baby measuring rod with large calipers

For precise measuring when a baby is lying down. The measuring rod can be firmly screwed to the changing table (wall mounting also possible) or used as a mobile rod. Large head and foot positioners make it easy to determine the length and the calipers

fold for ease of storage. Made of aluminum for durability.

- Measuring range: 0-99 cm
- Graduation: 1 mm



Movable calipers at one end of the measuring rod make this instrument suitable for use with both babies and toddlers.



Precise and easy-to-read measurements made possible by clear red markings.

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Measuring stations and column scales

What can a scale do besides weigh? Think.

The measuring stations and column scales by seca are distinguished by high precision and many features that simplify everyday medical work. Routine procedures are shortened, measuring and weighing are sped up and measurements from some products are transmitted to a PC or seca 360° wireless printer. Thus, doctors and nurses always have the data they need at hand, even the minor details like intuitive operation or easy cleaning of the platforms get a lot of attention at seca.

The measuring stations by seca

measure and weigh in a single step.

he measuring stations by seca are a big help in everyday medical work. Thanks to the combination of measuring rod and scale, height and weight can be digitally obtained in a single procedure. There's no longer any effort involved in figuring out the BMI. Once the patient's height has been confirmed, the BMI appears in the display.



seca | service

For seca 285:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support

Height and weight measured, displayed and transmitted together? There is such a thing – by seca, of course. With the wireless measuring station seca 285, height and weight can be obtained in one step. Along with the automatically calculated BMI, the results are shown in the three-line display. As required, the data can be quickly and securely transmitted wirelessly to a seca 360° wireless printer or PC.

seca **285**

Wireless measuring station for body height and weight (III)

The 360° wireless measuring station seca 285 measures and weighs in a single step. Other benefits include the high-capacity scale integrated in a stable glass platform, the heel positioner and the solid headpiece with the integrated seca Frankfurt Line – for precise head positioning. The seca 285 is equipped with two displays, one is for a direct read-out of height from the headpiece and the other, a three-line multi-function touch display that shows height, weight and the automatically calculated BMI. On top of all that, the scale shows the slightest weight changes with its fine 50-gram graduation and transmits all measurements via the seca 360° wireless.

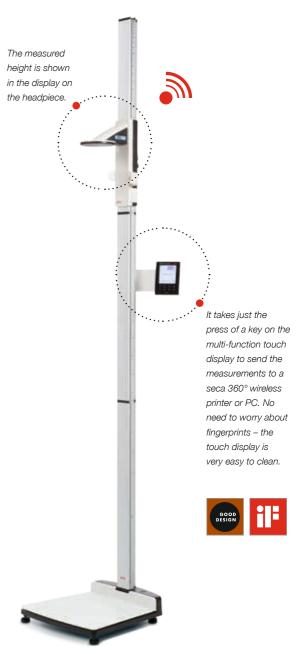
Scale:

- Capacity: 300 kg
- Graduation: 50 g < 150 kg > 100 g
- Functions: TARE, pre-TARE, mother/child-function,
 HOLD, auto-HOLD, auto-BMI, CLEAR, auto-CLEAR,
 auto weighing range switch-over, damping, SEND/PRINT
- RS232 compatible

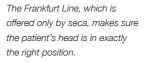
Measuring rod:

- Measuring range: 30-220 cm
- Graduation: 1 mm
- Functions headpiece: HOLD, user-defined zero setting, automatic switch-off, SEND/PRINT
- RS232 compatible

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101









The stable glass platform with integrated heel positioner guarantees precise measurement results and a secure foothold, even on a free-standing scale in the middle of the room.

Electronic measuring and weighing station with automatic BMI calculation (III)

With the electronic measuring and weighing station seca 764, both the height and weight of a patient can be obtained in just one step. After measuring and weighing, both values are indicated on two LCDs integrated into the display panel. On the basis of these values, the seca 764, at the touch of a button, automatically calculates the BMI of the patient. This value provides information on the general nutritional condition of the patient on the basis of the recognized WHO standard. With its capacity of 250 kg, its low platform and very robust design, the measuring and weighing station is particularly suitable for heavyweight patients.

Column scale:

Capacity: 250 kgGraduation: 100 g

Functions: TARE, HOLD, auto-BMIOptional: RS232 interface seca 460

Integrated Measuring rod:

• Measuring range: 110-200 cm

Graduation: 1 mm



The scale's low height enables even heavier patients to step effortlessly onto the platform.

Height can be measured digitally with the integrated measuring rod.





seca **764**

Electronic measuring and weighing station with integrated printer

In addition to the easy determination of both height and weight, this version of the seca 764 also provides absolutely reliable documentation of the results. The integrated thermal printer in the display is activated when the scale is mounted. As soon as the patient steps off the scale, height, weight and BMI values are automatically printed out. The measuring station is equipped with a time module, so the time and date are also printed on the 57 mm wide diagnostic printout. This not only guarantees that data is easily and safely recorded but also rules out errors in data transfer.



The display shows height and weight simultaneously in two windows.



The integrated thermal printer documents measurements on

Accessories

seca **460**

RS232 interface for connection to printer or PC

This interface allows the seca 764 measuring station to be connected directly to a PC or printer.



Thanks to the connection between scales and PC or printer, it is easy to analyze and record measurements

The column scales by seca

help wherever they can.

A fter more than 170 years, it's nearly impossible to imagine the medical field without seca scales. Thanks to the high precision, durable construction, and robust electronics, it is clear that there are precise details that go into every seca scale. Details like unmatched low energy consumption or smooth-rolling castors, make for effortless transport into the next room.

ation service

seca | service

For seca 704:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support

a added value

A column scale that can receive height measurements and then calculate the BMI? There is such a thing – by seca, of course. With the help of the new seca 360° wireless technology, the seca 704 can receive data from a wireless stadiometer (seca 274 or seca 264) and then automatically calculate the BMI from height and weight. Do the results need to be sent wirelessly to a PC or to a seca 360° wireless printer? It's as easy as pressing the function key.

seca **704**

Wireless column scale with capacity up to 300 kilograms (III)

Weighing small children to obese patients – the seca 704 can do it all. Especially when it comes to finding out BMI and height. Then there are two options: integrate a mechanical measuring rod or receive data wirelessly from a separate digital stadiometer. Other advantages include the high load bearing capacity of up to 300 kg for heavyweight patients, the large and flat platform and time-saving functions Pre-TARE, HOLD, Auto-HOLD and mother/child-function. With everything primed for the future and integration in EMR using the seca 360° wireless.

- Capacity: 300 kg
- Graduation: 50 g < 150 kg > 100 g
- Functions: TARE, pre-TARE, mother/child-function, HOLD, auto-HOLD, BMI, auto-CLEAR, damping, automatic switch-off, SEND/PRINT
- Optional: measuring rod seca 220 or seca 224, power adapter seca 447, switch-mode power adapter seca 400
- RS232 compatible

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and

seca emr flash 101, stadiometer seca 274 or seca 264





Optional telescopic measuring rod.

Practical castors permit mobile use.



With the seca 360° wireless technology and the press of a key, the seca 704 can send measurements to an optional seca 360° wireless printer or seca software on the PC.

Electronic column scale with BMI function (III)

Versatile, low-maintenance and site-independent with economic battery operation – the seca 799 is ideal for daily use in hospitals and doctors' practices. With its transport castors, the column scale is also easy to move around. The seca 799 is equipped with several intelligent functions. For example, the BMI function permits a reliable evaluation of the nutritional condition of the patient. The column scale can also be fitted with the optional measuring rod seca 220 or seca 224 so that both height and weight can be determined in just one time-saving step.

- Capacity: 200 kg
- Graduation: 100 g < 150 kg > 200 g
- Functions: TARE, HOLD, BMI, weighing range
- Optional: measuring rod seca 220 or seca 224, power adapter seca 447, switch-mode power adapter



- switch-over, automatic switch-off
- seca 400



seca 220

Telescopic measuring rod for seca column scales

This telescopic measuring rod can be fitted at any time to many seca column scales. It has the same convenient eye-level read out for even taller patients.

- Measuring range: 60-200 cm
- Graduation: 1 mm



All it takes is the press of a key to find out BMI.



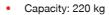


The optional sidemounted measuring rod allows convenient measuring and weighing in one step.

seca **711**

Mechanical column scale with eve-level beam (III)

With a capacity of 220 kg, this mechanical column scale is the ideal solution for weighing even overweight patients. This is due partly to the generously proportioned, low platform. A ridged rubber mat also safely prevents the patient from slipping when stepping onto the scale. The scale is printed on both sides to allow both the patient and the user behind the scale to read the weight. The high-quality base is made of cast iron, the column from steel - this guarantees not only firm footing, but also a long service life. The column scale can also optionally be fitted with the seca 220 measuring rod.



Graduation: 100 g

• Functions: reset-to-zero function

• Optional: measuring rod seca 220



seca **756**

Mechanical column scale with BMI display @

The seca 756 is one of the first mechanical column scales which displays weight and the nutritional condition of the patient with the BMI function. When the patient steps onto the scale, a BMI disc of contrasting color is set in motion below the very precise weight display on the large, clear dial. It is visible in a small window next to which a height scale is printed. Once the weight has been determined, it is easy to read the BMI range which, with contrasting colors, is split up into underweight, normal, overweight and obesity (abnormally overweight). A flat tread area and practical transport castors are further advantages of the seca 756. The column scale is also available with measuring rod.



Graduation: 500 g

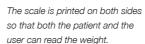
• Functions: BMI, reset-to-zero function

Optional: measuring rod seca 224











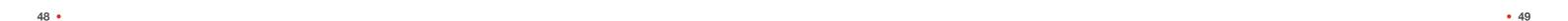
The broad slip resistant base and anti-tip column design provide a firm footbold



The separately available measuring rod permits simultaneous measuring and weighing.



It is easy to determine BMI with the colorcoded dial.





Flat scales

Even space-saving scales do plenty for the patient.

here space is limited, there is still enough room for seca scales and their many functions. Routine medical work is made easier. Other features of seca flat scales include the high weight-bearing capacity of up to 300 kilograms and the extremely long usage, powered by a battery set. Practical accessories such as carrying cases and a stand for a separate display, make work easier for the user.

The extra-large platform is easy to step onto and slip proof.



optimized

seca **635**

Wireless platform and bariatric scale (III)

Obesity is the fastest growing health problem in the world. This battery-operated digital scale has been especially developed for weighing obese patients, with a weighing range of up to 300 kg and a non-slip 56 x 56 cm platform, only 5.5 cm high - a sturdy base for overweight or obese patients. A chair may also be used on the scale and will not influence the weighing result due to the pre-TARE function. The cable remote display (cable length: 2.5 m) with easy-to-read LCD can be held, wall mounted or placed on a table. The 100 g graduation means that the smallest changes in weight are registered, even after the patient has left the scale – thanks to the HOLD function. The integrated Body Mass Index (BMI) function and the seca 360° wireless technology, which can be used to transmit the measurements to a seca wireless printer or PC at the push of a button emphasizes the many uses of this unique multifunctional scale.

- Capacity: 300 kg
- Graduation: 100 g < 200 kg > 200 g
- Functions: TARE, pre-TARE, HOLD, auto-HOLD, BMI, auto-CLEAR, auto weighing range switch-over, damping, automatic switch-off, SEND/PRINT
- Optional: stand for cable remote displays seca 472, power adapter seca 447, switch-mode power adapter seca 400
- RS232 compatible

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101, stadiometer seca 274 or seca 264

seca | service

For seca 635:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support

eca added value

Flat scales for heavy weight patients with a separate display element? There is such a thing – from seca of course. It is the platform and bariatric scales seca 635. The advantage of the mobile display provides medical staff with the ability to read the results from any location – discreetly and conveniently at a desk, at eye-level on the wall or from a stand in the middle of the room.



The patient's BMI can be determined when their height is entered.

It's easy to step onto the extra large, slip proof platform.



Accessories

seca 472

Stand for cable remote display of seca scales

The seca 472 stand is the stable solution for cable remote displays of seca 635, seca 657 and seca 675 scales. The sturdy construction with non-slip steel feet can be positioned anywhere quickly and securely. The display element can easily be attached to the stand by means of a stable bracket.



Accessories

seca **421**

Carrying case

This carrying case is made from water-repellent material to allow safe transportation of the seca 899 flat scale. The handy side pocket also allows safe transportation of a cable remote display or other accessories.



seca **899**

Flat scale with cable remote display

A two-meter long cable connects the display with the weighing base. Advantage: the display can be set up separately from the base and read from its position on the wall or desk. Additional convenience is supplied by the many extra weighing functions: BMI for nutritional conditions, HOLD to keep measurements displayed and TARE for weighing small children held in an adult's arms. It is suitable for stationary or mobile use thanks to its handle, compact size, low weight and a leveling base for set-up on all types of surfaces.

- Capacity: 200 kg
- Graduation: 100 g < 150 kg > 200 g
- · Functions: TARE, HOLD, BMI, automatic switch-off
- Optional: stadiometer seca 217 combined with adapter element seca 437, power adapter seca 447, carrying case seca 414 (for combination with stadiometer and adapter element) and seca 421



The angle of the display can be adjusted for easy reading and can be used separately from the base.



Both doctor and patient can see the result at the same time in the double display.

A mobile measuring and weighing system? There is such a thing – from seca of course. With the addition of the adapter element seca 437 for the measuring rod seca 217, the flat scale seca 878 turns into a mobile and very stable 2-in-1-solution. Measuring and weighing can be done at the same time – with the same quality as with permanently installed equipment. When stored in the carrying case seca 414, the mobile measuring and weighing system can be used anywhere.



The two push buttons on the front side of the scale can be operated with the foot.

seca **878**

Flat scale for mobile use with push buttons and double display (III)

The seca 878 can do everything that a scale in mobile use should do and more. It is light, extremely robust, easy to operate, provides precise measurements in any level of humidity and has a long battery life – or can alternatively be connected to the mains. When conducting one examination after the other, there's no need to bend over repeatedly, thanks to the push button that can be turned on and off with a toe tap. The double display lets the patient and medical personnel read the results from two different aspects at the same time. Thanks to the 2 in 1 button, the scale can weigh a child held in its parent's arms.

- Capacity: 200 kg
- Graduation: 100 g < 150 kg > 200 g
- Functions: mother/child-function, HOLD, automatic switch-off
- Battery-operated or using power adapter
- Optional: stadiometer seca 217 combined with adapter element seca 437, power adapter seca 447, switch-mode power adapter seca 400, carrying case seca 414 (for combination with stadiometer and adapter element) and seca 415



Possible combination

seca 878, seca 217, seca 437 and seca 414

Mobile measuring and weighing system for schoolchildren and adults

To determine height and weight of school children and adults in a standing position, a special adapter element turns the stadiometer and flat scale into a perfect measuring and weighing station. It delivers two measurements in one step – with the same quality found in hospitals. Even though the elements are lightweight and easily assembled, the system is extremely stable and warp-resistant. Almost like a permanent installation.





Flat scale for mobile use III

Scales intended for mobile use have to be lightweight. The compact seca 877 weighs only 4.2 kilograms, nevertheless very stable and suitable for patients weighing up to 200 kilograms. It stands firmly on four leveling bases that guarantee stability, even when small children are weighed while held by an adult. The mother/child-function ascertains the tare of the weight with just the touch of a button.

- Capacity: 200 kg
- Graduation: 100 g < 150 kg > 200 g
- Functions: mother/child-function, tip-on automatic switch-on, automatic switch-off
- Optional: stadiometer seca 217 combined with adapter element seca 437, carrying case seca 414 (for combination with stadiometer and adapter element) and seca 415



Tap-on function for weighing without turning on the scales.





Accessories

new

seca **415**

Carrying case

This practical carrying case can be used to safely transport the flat scales seca 878 and seca 877.

seca **761**

Mechanical personal scale @

The precise design classic has a large clear and welldefined dial. With a large, low-level, non-slip platform and scratch resistant finish it is easy for the patient to step on and weigh.

Capacity: 150 kg

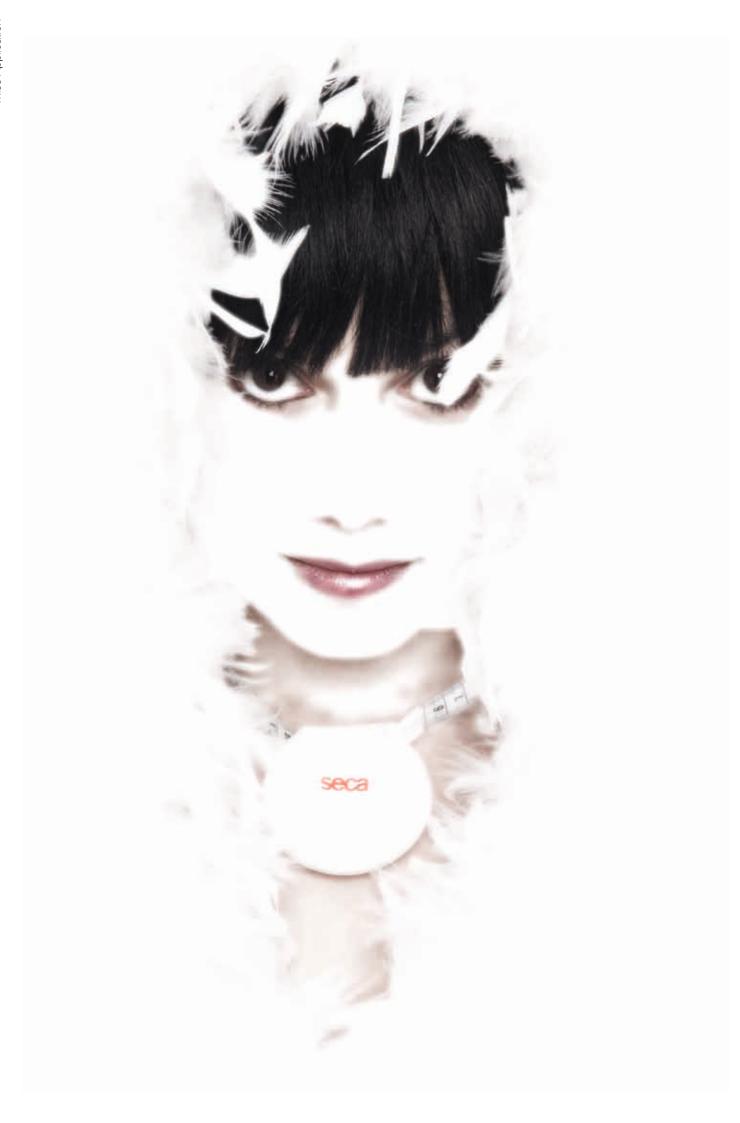
Graduation: 1 kg

• Functions: reset-to-zero function



The rugged metal housing withstands years of use under the hardest conditions imaginable.





Height measuring systems

When the quality is right, so are the measurements.

easuring rods and circumference measuring tapes are relatively simple devices in routine medical work – they still have to fulfill challenging clinical requirements. That's why seca produces such items as non-abrasive measurement scales and parts made of distortion-resistant anodized aluminum. For quality you can feel – in devices that transmit your data at the touch of a button into the seca 360° wireless network and in headpieces that always glide smoothly into position and so guarantee consistently precise measurements.

Wireless stadiometer – for use anywhere with display on the headpiece

If you are looking for a wireless solution for taking height measurements, you cannot go wrong with the free-standing digital stadiometer seca 274. Its individual parts of high-quality aluminum can be easily assembled and tightly screwed together and its measuring range from 30 cm to 220 cm can be used for small children to adults. Additional benefits include the stable glass platform, the white backlit display on the headpiece and wireless data transmission. Data can be sent to a seca 360° wireless printer, a PC or a wireless scale that can calculate the BMI from height and weight measurements.

- Measuring range: 30-220 cm
- Graduation: 1 mm
- Functions: HOLD, user-defined zero setting, automatic switch-off, SEND/PRINT
- RS232 compatible

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101, seca mBCA 515, column scale seca 704, flat scale seca 635, multifunctional and wheelchair scale seca 645, seca 685, seca 677, seca 665, seca 657 and chair scale seca 959

The stable glass platform of the seca 274 with integrated heel positioner guarantees precise measurement results and a secure foothold.

A wireless stadiometer that can send its measurements to a PC? There is such a thing - from seca of course: the digital stadiometer seca 274 (free-standing) and seca 264 (for wall mounting). Both transmit the measured height with the help of the newest seca 360° wireless technology to the PC, where they are analyzed by the PC software seca analytics 115. From there they can also be transmitted to an Electronic Medical Record (EMR) system.



With the patient's head precisely positioned, the seca Frankfurt Line guarantees exact measurements



The leveling feet allow firm footing, even on uneven surfaces.

seca **264**

Wireless stadiometer for permanent use, with display on the headpiece

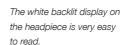
The goal of accomplishing more in fewer steps is as important in medicine as in other fields. The stadiometer seca 264 helps make that possible. For example, the heel positioner and the seca Frankfurt Line on the headpiece ensure that the patient is in the right position and thereby contribute to obtaining accurate measurements. Height measurements can be read with a guick glance at the white backlit display on the headpiece. Wireless data transmission is made to a seca 360° wireless printer, a PC or a wireless scale.

- Measuring range: 30-220 cm
- · Graduation: 1 mm
- Functions: HOLD, user-defined zero setting, automatic switch-off, SEND/PRINT
- RS232 compatible

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101, seca mBCA 515, column scale seca 704, flat scale seca 635, multifunctional and wheelchair scale seca 645, seca 685, seca 677, seca 665, seca 657 and chair scale seca 959









The easy-to-clean mat of the seca 264 puts the patient's feet in the right position and gives the barefoot patient a safe and comfortable footing.

seca I service

For seca 274 and seca 264:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support

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Stable stadiometer for mobile height measurement

The mobile stadiometer seca 217 boasts unmatched stability, a cleverly designed assembly system and particularly high-quality materials. All this lends the stadiometer an exceptionally high degree of stability – almost the same as a permanent installation. In addition, the adjustable spacer ensures a secure hold without any fittings. Suitable for medical practices and hospitals, the stadiometer is also just right for mobile use, such as examinations of children at school or patients at home. When disassembled, the stadiometer is easy to carry anywhere.

- Measuring range: 20-205 cm
- Graduation: 1 mm
- Optional: adapter element seca 437 (for combination with flat scale seca 899, seca 878 or seca 877), carrying case seca 414 or seca 412



Portable stadiometer

At only 2.4 kg, the seca 213 mobile stadiometer is especially suitable for use in the field but also ideal for doctors' practices and pediatric hospitals. The measuring rod can be dismantled into several pieces and set up easily and quickly. The spacer keeps the rod straight and stable without any fittings. As the scale is printed along the side of the measuring rod, it is easy to read off the result while measuring, thus guaranteeing precise results - up to a height of

- Measuring range: 20–205 cm
- Graduation: 1 mm
- Optional: carrying case seca 412

seca **222**

Mechanical telescopic measuring rod with large measuring range

Specially developed for wall mounting, this measuring rod is aligned to work exactly to the millimeter from tip to toe. Its broad measuring slide and heel positioner are professional prerequisites. The telescopic measuring rod ensures that the result can be easily read at eye level even for the tallest patient. When not in use, the measuring slide can be folded down for safety.

- Measuring range: 6–230 cm
- Graduation: 1 mm





The spacer provides extra stability and ensures precise measurement results.



The robust base plate guarantees a sturdy stance.



The seca 437 adapter element connects the stadiometer to a flat scale.



The integrated handle and securely locking parts make the stadiometer easy to carry.



Large platform for stability.



The foot positioner ensures exact positioning and precise measurements.

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• 65

seca **216**

Mechanical measuring rod for children and adults

The seca 216 has a variable scale with a range of 3.5 to 230 centimeters that is inserted into a 138 cm frame. The plastic frame is simply mounted on the wall at the desired height. As the user can choose the range shown in the frame, the seca 216 is suitable for measuring children or adults. The results are clearly displayed in a window on the side of the rod and held in place by the locking screw on the head piece. Suitable for international use, the scale is printed in centimeters on one side of the tape and centimeters and inches on the other.

- Measuring range: max. 138 cm, variable from 3.5-230 cm
- Graduation: 1 mm



Whether for children or adults - the measuring range can be adjusted as needed.

The graduation index can be fixed in place with the locking screw.



seca **206**

Mechanical measuring tape

The space-saving solution with roll-up mechanism. Uncomplicated fixing on wall with just one screw. With the display window in the head piece, it's easy to read the height. The durable tape is made of metal.

- Measuring range: 0-220 cm
- Graduation: 1 mm



The wall mounting of the measuring tape with roll mechanism reduces space requirements drastically.



The head slide makes it easy to

read the measurement.



seca **201**

Ergonomic circumference measuring tape

Today's circumference tapes also have to satisfy high medical demands. That is why seca has developed the seca 201 which can measure girth with millimeter precision. The high-quality mechanics guarantee that the 205 cm long tape unwinds easily and locks in place precisely. The housing sits comfortably and securely in the user's hand and is tough enough to withstand accidental dropping.

- Measuring range: 0-205 cm
- Graduation: 1 mm



64 •



Multifunctional and wheelchair scales

Effortless for the patient, easy for medical staff.

wheelchair scales by seca are easy to use whether the patient is sitting in a wheelchair or standing. Four load cells ensure that a patient can be measured regardless of position – standing without support or holding onto the handrail, in the middle of the scales or at the edge. There is no need for careful positioning of the patient or adjustments to the scales. Emphasis is on convenient operation with wireless transmission of data to a PC or a seca 360° wireless printer.

optimized

seca **645**

Wireless multifunctional handrail scale (11)

Equipped with an extremely low-level, easy-access platform, a stable handrail, and high weight-bearing capacity, this multifunctional scale ensures safe and comfortable weighing of heavy patients. The integrated handrail provides the patient with support throughout the weighing process – or sat on a chair placed on the generous platform. The pre-TARE function with three memory cells automatically deducts a stored weight (such as a chair) to determine net weight. The seca 645 is also equipped with seca 360° wireless technology which can be used to transmit the measurement results wirelessly to a seca wireless printer or the seca software on a PC. Moreover, the seca 645 is made mobile by two rubber wheels and a power supply provided by rechargeable batteries or power adapter. When the scale is connected to a printer, the time of weighing and the patient's weight are automatically recorded and printed by the time module.

- · Capacity: 300 kg
- Graduation: 100 g < 200 kg > 200 g
- Functions: TARE, pre-TARE, HOLD, auto-HOLD, BMI, auto-CLEAR, auto weighing range switch-over, damping, automatic switch-off, SEND/PRINT
- Optional: measuring rod seca 223
- RS232 compatible





Accessories

seca **223**

Telescopic measuring rod for handrail scales

This easy-to-fit measuring rod (fittings included) converts the handrail scale seca 645 into a real all-round talent. The determined height can be entered directly into the control unit of the seca 645 so that all relevant data is captured and used to determine the BMI.

- Measuring range: 6–230 cm
- · Graduation: 1 mm



ing rod permits measuring and weighing in one step.

seca I service

For seca 645 and seca 685:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support



The display can be rotated in every direction.



Because the handrail is part of the weight sensitive area, measurements are absolutely sure even if the patient supports himself on it



seca **685**

Wireless multifunctional scale (III)

The patient can be safely and accurately weighed while standing, seated or in a wheelchair. No conversion is required. The stable handrail supports the standing patient, the integrated fold-down seat provides comfort for the seated patient, and the large platform (76 x 82 cm) accommodates a patient in a wheelchair. The weight of the wheelchair or walker is simply deducted with use of the pre-TARE function. Special attention has been given to making the scales easy to access and safe, with a stop barrier provided for the front wheels of the wheelchair. Furthermore, the seca 685 is equipped with the new seca 360° wireless technology, which wirelessly transmits all measurements to a seca wireless printer or to seca software on a PC. Additional details: easy-to-read swiveling display can be turned toward patient or caregiver, the practical HOLD function shows the weighing result after the patient has left the platform, the

damping function ensures precise results, the non-slip rubber coating and handrail guarantee a firm foothold and integrated transport castors make the scale mobile. The access ramp seca 470 is included in the supply schedule.

- · Capacity: 300 kg
- Graduation: 100 g < 200 kg > 200 g
- Functions: TARE, pre-TARE, HOLD, auto-HOLD, BMI, auto-CLEAR, auto weighing range switch-over, damping, SEND/PRINT
- RS232 compatible

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101, stadiometer seca 274 or seca 264



Patient can stand or sit when being weighed.

The rotating display can be oriented towards the patient or medical personnel.

A fold-out seat with integrated damping system? There is such a thing - from seca of course. Our wireless multifunctional scale seca 685 have a stop barrier for wheelchairs and another detail that adds to overall safety. A spring in the mechanism for the integrated seat keeps the seat securely in place until it is released for use.

68 •

Wireless wheelchair scale with handrail and transport castors (III)

Stable, functional and mobile: thanks to its large platform and sturdy handrail, the seca 677 is extremely versatile. Patients can be weighed while sitting in a wheelchair or on a chair. The handrail provides valuable support for people who are frail or can walk only with great difficulty. Its high load capacity makes the seca 677 ideal for weighing very heavy patients. After use the scale can be folded together to save space. The sturdy locking device between rail and platform ensures that the seca 677 stands safely even when folded. The handrail also serves as handle when the scale is folded, allowing the scale to be moved around or stowed away effortlessly and quickly on its transport castors. Weighing is simple and user-friendly with the clearly designed, operable display at hip level, additional functions of TARE, auto-HOLD, BMI and the SEND key to transmit measurements wirelessly to a seca wireless printer or the PC.

- Capacity: 300 kg
- Graduation: 100 g < 200 kg > 200 g
- Functions: TARE, pre-TARE, HOLD, auto-HOLD, BMI, auto-CLEAR, auto weighing range switch-over, damping, SEND/PRINT
- RS232 compatible

70 •

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101, stadiometer seca 274 or seca 264

seca | service

For seca 677 and seca 665:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support

eca added value

A handrail for support that doesn't falsify the measurement? There is such a thing – from seca of course. The handrail on our transportable wireless wheelchair scale seca 677 gives the patient a feeling of security and, thanks to its special technology, delivers accurate measurements even when the patient leans on or holds onto the handrail.



The scales can be folded for easy transport.



Integrated ramp folds up for trouble free transport.



seca **665**

Wireless electronic wheelchair scale (III)

With its high capacity of 300 kg, this scale makes it easy to weigh even heavy patients. Easy access is assured by its extremely low platform and the self-lowering ramps. The secure side rails give additional safety. An integrated pre-TARE function determines in seconds the net weight of the patient by utilizing internal weight memory. All the data can be transmitted wirelessly to a printer or PC immediately after weighing. The swiveling LCD with large letters is easy to read both for the patient and for the caregiver. The seca 665 can be folded up in no time and can be transported anywhere, thanks to its roller castors.

- Capacity: 300 kg
- Graduation: 100 g < 200 kg > 200 g
- Functions: TARE, pre-TARE, HOLD, auto-HOLD, BMI, auto-CLEAR, auto weighing range switch-over, damping, automatic switch-off, SEND/PRINT
- RS232 compatible
- System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101, stadiometer seca 274 or seca 264

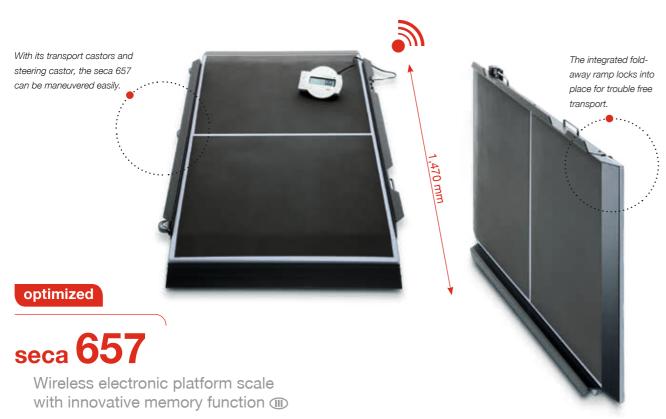


The seca 665 simply folds up and moves easily across the floor on castors.



The platform's side rails keep a wheelchair safe and secure.

• 71



The especially large platform of the seca 657 makes it possible to weigh patients on all commonly used stretchers. Patients can also be weighed while sitting in wheelchairs or on a chair. A unique characteristic of the seca 657 is the memory function. This practical feature helps to lighten the workload especially in the emergency unit: first the total weight of the patient and stretcher or wheelchair is determined. The stretcher or wheelchair is then weighed separately and the net weight of the patient appears automatically on the display. A cable remote display with easy-to-read LCD figures is included in delivery. This display is operated intuitively and is equipped with many additional functions. With the pre-TARE function, the extra weight of a stretcher or wheelchair can be deducted directly from the total weight during the weighing process. With the BMI function, the nutritional condition of the patient can be determined. Thanks to its robust design and capacity of 300 kg, the seca 657 can weigh even overweight persons with no problem at all. With the practical castors and integrated handles,

the seca 657 is also transportable for use in various locations. And with the seca 360° wireless technology, the measurements can be sent to a seca wireless printer or the PC at the push of

- · Capacity: 300 kg
- Graduation: 100 g < 200 kg > 200 g
- Functions: TARE, pre-TARE, HOLD, auto-HOLD, BMI, auto-CLEAR, auto weighing range switch-over, damping, RESET, SEND/PRINT
- RS232 compatible
- · Optional: Stand for cable remote displays seca 472

seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and

System compatible with: 360° wireless printer advanced seca emr flash 101, stadiometer seca 274 or seca 264

seca I service

For seca 657:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support



The free-standing display quarantees comfortable read-out of measurements.



The ramps makes it easy to mount the scales.



seca **675**

Electronic platform scale @

This electrically-operated, generously-sized wheelchair/ platform scale is multifunctional. It weighs patients in care, especially heavy patients, persons in wheelchairs and seated patients with circulatory trouble, even during dialysis. The flexible cable remote display can be placed anywhere (e.g. on a desk or table) for convenient read-out and operation of the controls. A wall mounting is also provided. Transport castors and a handle make the seca 675 mobile.

Capacity: 300 kg

• Graduation: 100 g < 200 kg > 200 g

 Functions: TARE, pre-TARE, HOLD, BMI, weighing range switch-over, damping

· Optional: Stand for cable remote displays seca 472, second ramp seca 470

Accessories

seca **472**

Stand for cable remote displays of seca scales

The seca 472 stand is the stable solution for cable remote displays of the seca 635, seca 657 and seca 675 scales. The sturdy construction with non-slip steel feet can be positioned everywhere quickly and securely. The display element can easily be attached to the stand by means of a stable bracket.

Accessories

seca 470

Second ramp for seca 675

Optional accessory: this ramp for platform scale seca 675 makes it even easier to get onto the scales with a wheelchair from both sides.



Thanks to the ramp, a wheelchair rolls easily and comfortably onto the platform.



72 •

Chair scales by seca

Competence takes the chair.

ow can you gently and carefully weigh bedridden patients or people who are unsteady on their feet? The best choice is a seca chair scale, which you can take directly to the patient. That saves you – and nursing staff – from unnecessary steps. And with the scale's wireless function, transmission of data to a printer or a PC is quick and easy.

seca | service

For seca 959:

- On-site seca 360° wireless installation service
- Remote or on-site EMR integration service
- Remote or on-site software support

seca added value

A chair scale that weighs with a graduation of 50 grams? There is such a thing – from seca, of course. The seca 959 is the first and only wireless chair scale on the market that weighs with a graduation of 50 grams. The advantage of this fine graduation is particularly important in paediatrics. Now children who cannot stand on their own can be weighed precisely and accurately while seated. Furthermore, medical personnel can detect the slightest weight changes in serial measurements with the seca 959.

seca **959**

Wireless chair scale to weigh seated patients (III)

Care and comfort were kept in mind when designing the stable model with a circular steel tube frame. The comfortable seat provides a safe position while the swiveling armrests and adjustable footrests make the chair scale more user-friendly. The locking rear wheels ensure that it is safe to sit down and stand up at all times. The positioning of the large LCD display unit behind the chair permits intuitive operation of functions TARE, HOLD and BMI. At the press of a button, the seca 360° wireless technology transmits measurements to a seca wireless printer or a PC. This mobile chair scale, which can be operated by a rechargeable battery or electricity, provides enormous helpin rehab, orthopedics, dialysis and nursing homes. Its fine graduation of 50 grams is particularly valuable in paediatrics,



With its exceptionally high capacity of up to 300 kg, the BMI function and options to use mains or battery power, the chair scale seca 959 is ideal for use in any situation.



The seca 956 is running on batteries instead of mains power, and offers a capacity of 200 kg.





seca **956**

Chair scale for weighing while seated (III)

allowing small children who cannot yet stand on their own to be weighed while seated. The practical pouch seca 471 attached to the scale frame stores the mains adapter.

- Capacity: 300 kg
- Graduation: 50 g < 150 kg > 100 g < 250 kg > 200 g
- Functions: TARE, pre-TARE, HOLD, auto-HOLD, BMI, auto-CLEAR, auto weighing range switch-over, damping, automatic switch-off, SEND/PRINT
- RS232 compatible

System compatible with: 360° wireless printer advanced seca 466, 360° wireless printer seca 465, 360° wireless USB adapter seca 456, software seca analytics 115 and seca emr flash 101, stadiometer seca 274 or seca 264

With a capacity of 200 kg and a graduation of 100 grams, the seca 956 fulfills all basic medical standards. Added to that are the typical seca advantages such as fold-up armrests and footrests, secure wheel brakes, an ergonomically shaped seat and smooth rollers, which, together with the ergonomically shaped handle, make it very easy to push the chair scale. Of course the seca 956 is also equipped with the important TARE function which allows every newly added weight to be ascertained separately and the HOLD function which lets medical personnel take care of the patient first and read out the results later.

- Capacity: 200 kg
- Graduation: 100 g
- Functions: TARE, HOLD, automatic swich-off



The supplied carrying case provides space to store the power supply cable together with the scale.

The armrests can also be folded away to allow patients better access from the side.



The large footrests can be folded completely out of the way so that the patient can safely and comfortably take a seat.

The footrests can be folded away to make it easier for patients to stand up and sit down.

Every gram counts

when lying in bed.

ur bed and dialysis scales have been carefully tested in the past by specialists and intensive care consultants in dialysis and burn units. They are now also being used to an increasing extent in nursing homes, since every gram is important in the case of immobile patients, precision is what counts. The bed and dialysis scales from seca with their alarm function can assist critical monitoring in the case of clinical procedures involving the loss of fluid or special fluid turnover, or simply in areas where patients can be weighed only in bed.





seca **985**

Electronic bed and dialysis scale with equipment trolley (III)

Always in use: the seca 985 facilitates the easy, gentle and precise weighing of bedridden patients and is an indispensable aid in dialysis and intensive care. With the integrated lifts, four load cells can be placed easily and effortlessly under the castors of the bed. The previously determined weight of the bed is deducted using the TARE function and the patient's precise weight is determined. In the event of a power failure, the scale stores all previously displayed values using rechargeable batteries. When not in use, the four bed lifts can be stored on the equipment trolley.

Capacity: 500 kg

Max. patient weight: 250 kg

• Graduation: 100 g < 200 kg > 200 g

Functions: TARE, pre-TARE,
 HOLD, BMI, limit value, damping

Optional: RS232 interface seca 460





The patented lift mechanism permits placement of the load cells without any effort.

76 •

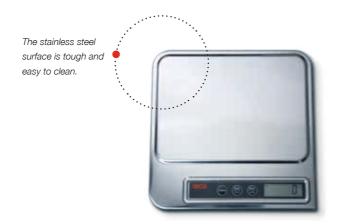
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Specialized scales and BMI calculator

Small size, big help.

s a specialist for medical measuring and weighing, seca naturally offers solutions for special medical applications. For instance, the splash-protected organ and diaper scale, the extremely precise portion and diet scale for clinical nutritionists or the practical BMI calculator that quickly determines a patient's nutritional condition.





seca **856**

Electronic organ and diaper scale with stainless steel cover

The organ scale seca 856 has been designed to meet the specific requirements in its area of application. The raised display is protected from soiling by fluids and the specially sealed battery compartment keeps moisture away from the electronic parts. This scale also fulfills tough hygienic standards with a sealed stainless steel surface that's easy to clean. With the aid of the pre-TARE function, the additional weight of containers can simply be deducted for precise determination of net weight. The fine one-gram graduation ensures highly precise results.

- Capacity: 5 kg
- Graduation: 1 g < 3 kg > 2 g
- Functions: TARE, pre-TARE, HOLD, automatic switch-off



seca **852**

Digital portion and diet scale

Operation of these scales with the TARE function is wonderfully simple. It can be repeatedly reset to zero, regardless of how many ingredients are already in the bowl. The scales and bowl are so perfectly matched that the scales simply slip into the bowl for storage.

- · Capacity: 3 kg
- Graduation: 1 g
- Functions: TARE, automatic switch-off



seca **491**

BMI calculator

Obesity is considered to be the fastest growing health risk in the world. It is therefore all the more important to determine the exact nutritional condition of a patient with the Body Mass Index (BMI) – one of the few internationally acknowledged values when it is a question of obtaining a meaningful height/ weight ratio. With our battery and solar-operated BMI calculator seca 491, every doctor, nurse and caregiver can determine the BMI simply and quickly in a few steps.



In storage too the scale and bowl have a perfect connection.

The fine graduation to just one gram permits precise weighing.



seca printers don't just print -

they also assist with analysis.

easurements received from the seca 360° wireless products can be printed out by seca wireless thermal printers. The printers also assist with the analysis and interpretation of the data by presenting BMI in graphic displays and comparing growth percentiles of children with the relevant statistical norms.

seca **466**

seca 360° wireless printer advanced for reception, analysis and printing of measurements on thermal paper or labels

With the wireless printer advanced seca 466 with integrated automatic cutting tool, measurements transmitted by the seca 360° wireless products can be printed quickly onto thermal paper or labels, which are then automatically separated. It also handles the automatic interpretation and analysis of results. The printer formats a graph of weight, height and BMI and compares the findings to standard ranges. The required reference values, which are on a separate memory card, can be configured easily with the seca print designer software. Other data such as the date and time format, language and the hospital or doctor's practice logo are processed in the same way.

- Print speed: 80 mm/sec
- Functions: print-out of height, weight, BMI, resting or total energy expenditure or percentiles for children, integrated automatic cutter
- Optional: 5 or 50 rolls of thermal paper seca 485,
 1 or 24 rolls of labels seca 486
- Included with printer: SD smart card, power adapter,
 SD card reader, 1 roll of thermal paper, 1 roll of labels

System compatible with: all measuring devices and scales in the seca 360° wireless system





Height, weight, BMI, resting energy expenditure, total energy expenditure or percentiles for children – in the layout file you can choose the information you want.



seca **465**

seca 360° wireless printer for analysis and printing of transmitted measurements on thermal paper

The seca 465 wireless printer is exactly the right partner for wireless measuring rods and scales by seca. Via its wireless receiver and pre-configured SD smart card, the printer receives the measurements transmitted by seca devices and analyzes the data. The printer compares height and weight to reference values as defined by WHO, CDC and Kromeyer-Hauschild et al., and ascertains percentiles for children. Resting energy expenditure and total energy expenditure based on parameters of gender, age and PAL (Physical Activity Level) are also calculated. As needed, Body-Mass-Index (BMI) or Body Fat Rate (BFR) can be analyzed and printed.

- Print speed: 80 mm/sec
- Functions: print-out of height, weight, BMI, resting or total energy expenditure or percentiles for children
- Optional: 5 or 50 rolls of thermal paper seca 485
- Included with printer: SD smart card, power adapter,
 SD card reader, 1 roll of thermal paper







The seca print designer software lets you integrate the logo used by the hospital/practice in the print-out. Or you can specify in which language the information should be printed.

Software

Analyze and transmit. This solution gives you more out of measuring.

Whith the new free software application seca emr flash 101, the seca 360° wireless products can transmit their results directly to any EMR system. The software is 100% compatible with all the EMR systems currently on the market. The software seca analytics 115 goes a step further by analyzing and interpreting the weight and height data and the measurements from the seca mBCA using 7 analysis modules. This process supports the doctor with early detection of disease, documentation tasks, and therapy success, as well as patient consultation.*



*Can also be connected to RS232.

seca analytics 115

Medical PC software for diagnostic assistance

With the network-capable software seca analytics 115, optionally available with three or six workstation licenses, doctors can process the measurements from their seca 360° wireless products, including the seca mBCA, in seven modules on the PC and thereby significantly improve the quality of the medical examination. Assistance is provided not only by the three integrated modules "Energy", "Cardiometabolic Risk" and "Growth/Development", but also the four additional seca mBCA modules "Fluid", "Function/Rehabilitation", "Health risk" and "Raw impedance data". In the total of seven modules, medical inquiries about the patient's general health status and nutritional condition are answered, measurements compared to standard values and findings displayed in a therapy planner. The entire analysis can be printed on a conventional printer specially configured by the user. This type of diagnostic assistance adds a completely new dimension to medical advice and gives doctors' offices and hospitals a distinct competitive advantage.

System requirements:

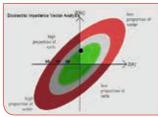
- Supported operating systems: Windows XP (SP3), Windows Vista (SP1), Windows 7, Windows Server 2003 (SP2) and 2008 R1 (SP2)
- Processor: 1.2 GHz or higher
- Hard Disk Space: minimum 1 GB
- Memory: minimum 512 MB RAM
- Additional HW: DVD drive
- Ports: for usage in combination with seca medical devices USB port (2.0) or serial interface (RS232)
- Display: 1024x768, High Colour (16-bit), 32-bit (recommended)

System compatible with: in combination with seca 360° wireless USB adapter seca 456 system compatible with all products in the seca 360° wireless system

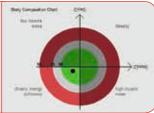
1 single location license free with every seca mBCA 515



For an exact assessment of health status and nutritional condition of children, height, weight and BMI are compared to percentiles. BMI, waist circumference and other laboratory data are used to assess the risk of coronary heart disease.



The proportion of fluid in the total body weight is important for prevention, diagnosis and therapy, e.g. for heart failure or kidney disease.



The composition and assessment of the body mass are important for the diagnosis and treatment of weight-related illnesses.



The seven modules for the analysis of examination results can be compiled for each patient as needed and presented in an easy-to-read PDF document.

seca | service

For seca analytics 115:

- Remote or on-site installation service
- Remote or on-site EMR integration service
- Remote or on-site software support



seca emr flash 101

Free software to connect seca 360° wireless products to Electronic Medical Record (EMR) systems

Simple, efficient and free — without any additional expense, medical science can take a giant step forward. The intuitive software seca emr flash 101, which transmits measurements directly to an EMR system, is now available as a free download at www.seca.com. In just seconds your measurement data from seca 360° wireless measuring devices and scales is assigned to the right patient ID.

System requirements:

- Supported operating systems: Windows XP (SP3), Windows Vista (SP1), Windows 7, Windows Server 2003 (SP2) and 2008 R1 (SP2)
- Ports: for usage in combination with seca medical devices USB port (2.0) or serial interface (RS232)

System compatible with: in combination with seca 360° wireless USB adapter seca 456 system compatible with all products in the seca 360° wireless system



seca | service

For seca analytics 101:

- Remote or on-site installation service
- Remote or on-site EMR integration service
- Remote or on-site software support

seca added valu

Is there a software program that can communicate with all EMR systems? Of course – from seca. No other manufacturer of measuring systems and scales offers direct wireless data transmission to an EMR system. But with the new free software application seca emr flash 101, you can transmit your measurements from seca 360° wireless products directly into an EMR system. The technological standard of the EMR system doesn't matter at all.

Accessories

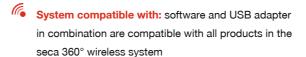
seca **456**

seca 360° wireless USB adapter for data reception on PC

The USB adapter seca 456 enables any PC to receive wireless data from seca measuring systems and scales. This eliminates annoying cable connections in the examination rooms and, with the PC software seca analytics 115, allows measurements to be stored in the seca database or fed into an EMR system, and provides other parameters in a PDF file (EMR-integrated). The labor-intensive process of documenting examination findings is turned into a speedy and paperless matter.

System requirements:

Supported operating systems: Windows XP (SP3),
 Windows Vista (SP1), Windows 7, Windows Server
 2003 (SP2) and 2008 R1 (SP2)







The wireless reception of measurements on the PC is the decisive step toward Electronic Medical Records.



seca mBCA



Page 08-13

Dimensions (WxHxD)

Capacity Graduation

Weight Display

Power supply

Approval class

Medical Device Class

Compatible printers

Interfaces

Measurement method

Measurement segments

Measurement current

Measurement time

Capacity

Fine graduation

seca mBCA 515

Page 08

976 x 1,251 x 828 mm

Medical Body Composition Analyzer.

300 kg

50 g < 150 kg > 100 g

36 kg

8.4" Touch-screen display, can be rotated 360°

power adapter

◍ lla

Touch-screen display USB 2.0 weighing platform Ethernet (10/100 Base-T)

seca 360° wireless, laser printer and inkjet printer via PC software seca analytics 115

8-point Bioelectrical Impedance Analysis

1; 1.5; 2; 3; 5; 7.5; 10; 15; 20; 30; 50; 75; 100; 150; 200; 300; 500; 750; 1,000 kHz

right arm, left arm, right leg, left leg, right half of body, left half of body, torso

100 μΑ

max. 20 seconds

Weighing range 1 = 150 kg Weighing range 2 = 300 kg

Weighing range 1 = 50 g Weighing range 2 = 100 g

PC software seca analytics 115 (with one workstation license included) combined with the 360° wireless USB adapter seca 456 is compatible with all products in the seca 360° wireless system

Software





seca analytics 115

Medical PC software for diagnostic assistance.

Page 14-23

Dimensions (WxHxD)

Supported operating systems

Processor Hard Disk Space

Memory Additional HW

Ports

Display

seca 360° wireless

Page 14

137 x 192 x 7 mm

Windows XP (SP3), Windows Vista (SP1), Windows 7, Windows Server 2003 (SP2) and 2008 R1 (SP2)

1.2 GHz or higher

minimum 1 GB

minimum 512 MB RAM DVD drive

for usage in combination with seca medical devices USB port (2.0) or serial interface (RS232) 1024x768, High Colour (16-bit), 32-bit (recommended)

all measuring devices and scales in the seca 360° wireless system

Accessories for software





seca 456

seca 360° wireless USB adapter for data reception on PC.

Page 19

85 x 23 x 10 mm

12 g

Page 14-23

Dimensions (WxHxD) Weight

Ports

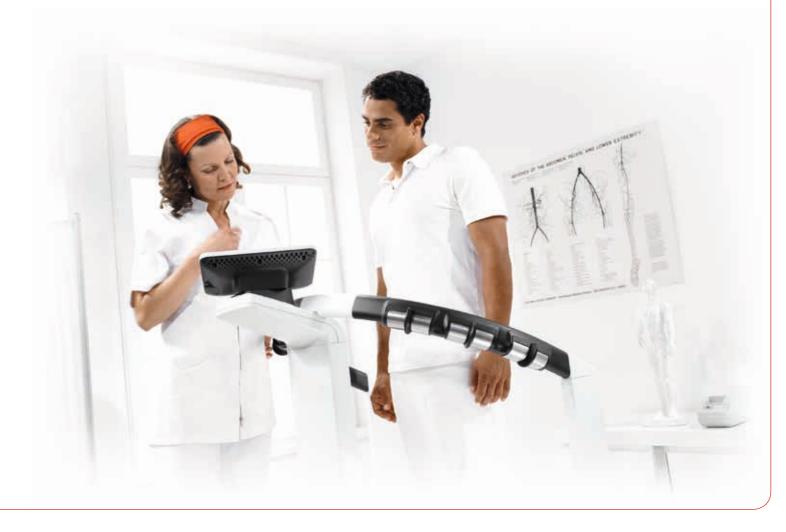
Supported operating systems

Windows XP (SP3), Windows Vista (SP1), Windows 7, Windows Server 2003 (SP2) and 2008 R1 (SP2)

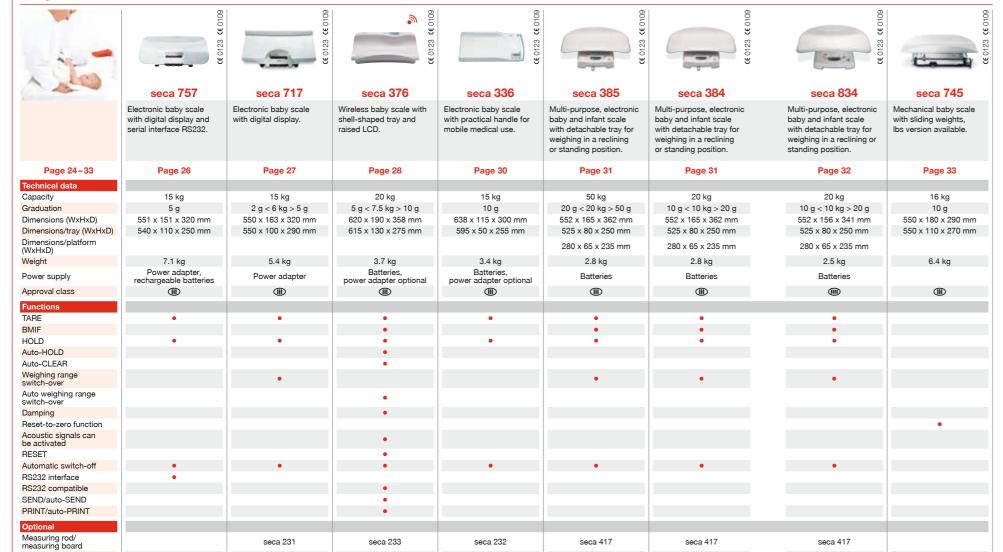
for usage in combination with seca medical devices USB port (2.0)

seca 360° wireless

all measuring devices and scales in the seca 360° wireless system



Baby scales



seca 232

seca 419

seca 447, seca 400

seca 428

seca 417

seca 413, seca 414



Accessories for baby scales

seca 451

Head/foot positioner

Interface cable

Power adapter

Carrying case

Areas of app Mobile weighing

seca 360° wireless

seca 231

seca 429

seca 233

seca 418

seca 447, seca 400

seca 466, seca 465, seca 456, seca analytics 115,



seca 417

seca 413, seca 414

seca 417

seca 413, seca 414

Pediatric measuring systems



Accessories for pediatric measuring systems





Measuring stat	ions and column	scales				
T	66 0123 66 0109	€ 0123 € 0109	© 0123 (¢ 0109	G 0123 G 0109	€ 0123 € 0109	€ 0123 € 0109
	seca 285	seca 764	seca 704	seca 799	seca 711	seca 756
	Wireless measuring station for height and weight with multi-function touch display and 50-gram graduation.	High-capacity electronic BMI station consisting of scale, measuring rod and BMI calculator.	Wireless column scale with very high capacity and large platform, with BMI function.	Electronic column scale with BMI function, lowmaintenance, easy to transport.	Mechanical column scale with eye-level beam.	Mechanical column scale with large dial and automatic display of the BMI range.
Page 40-49 Technical data	Page 42	Page 44	Page 46	Page 48	Page 49	Page 49
Capacity	300 kg	250 kg	300 kg	200 kg	220 kg	160 kg
Graduation	50 g < 150 kg > 100 g	100 g	50 g < 150 kg > 100 g	100 g < 150 kg > 200 g	100 g	500 g
Measuring range measuring rod	30-220 cm	110-200 cm				
Graduation measuring rod	1 mm	1 mm				
Dimensions (WxHxD)	434 x 2,394 x 466 mm	360 x 2,150 x 690 mm	360 x 930 x 520 mm	294 x 831 x 417 mm	520 x 1,556 x 520 mm	360 x 1,000 x 628 mm
Dimensions/platform (WxHxD)	430 x 60 x 365 mm	335 x 80 x 345 mm	335 x 80 x 345 mm	272 x 75 x 280 mm	335 x 80 x 345 mm	335 x 80 x 345 mm
Dimensions/packed in case (WxHxD)						
Weight	16 kg	16.7 kg	14.9 kg	6.3 kg	21.7 kg	18.5 kg
Power supply	Batteries, power adapter	Power adapter	Batteries, power adapter optional	Batteries, power adapter optional		
Approval class	(11)	(11)	(11)	(11)	(11)	
Functions/Accessories				_		
TARE Pre-TARE	•	•	•	•		
Mother/child function	•		•			
HOLD	•	•	•	•		
Auto-HOLD	•		•			
BMI Auto BMI			•	•		•
Auto-BMI BFR		•				
Patient data input	•					
CLEAR						
Auto-CLEAR	•		•			
Weighing range switch-over				•		
Auto weighing range switch-over	•		•			
Damping	•		•			
User-defined zero setting						
Reset-to-zero function					•	•
Backlighting	•					
Acoustic signals can	•		•			
be activated RESET	•		•			
Calibration/	•					
automatic calibration Automatic switch-off			•	•		
RS232 compatible	•		•	•		
SEND/auto-SEND	•		•			
PRINT/auto-PRINT	•		•			
Integrated printer Integrated measuring rod	•	alternative				
Transport castors	•	•	•	•	•	•
Optional						
Measuring rod			seca 220, seca 224	seca 220, seca 224	seca 220	seca 224
RS232 interface		seca 460				
Power adapter			seca 447, seca 400	seca 447, seca 400		
System compatible with						
	seca 466, seca 465,		seca 466, seca 465, seca 456,			
seca 360° wireless	seca 456, seca analytics 115, seca emr flash 101		seca analytics 115, seca emr flash 101 seca 274, seca 264			

Flat scales

Flat scales					
	seca 635 Wireless scale for heavy persons with large stepon surface, cable-link remote control and high loadbearing capacity.	seca 899 Robust flat scale with cabled remote display, BMI, HOLD and TARE for mobile use.	seca 878 Electronic flat scale for mobile use with push buttons and double display.	seca 877 Robust, very light flat scale with integrated display, Tip-on automatic switch on and mother/ child function for mobile use.	seca 761 Mechanical flat scales with large dial.
Page 50-57	Page 52	Page 53	Page 54	Page 56	Page 57
Technical data Capacity	300 kg	200 kg	200 kg	200 kg	150 kg
Graduation Dimensions (WxHxD)	100 g < 200 kg > 200 g 640 x 55 x 600 mm	100 g < 150 kg > 200 g 321 x 60 x 356 mm	100 g < 150 kg > 200 g 321 x 61 x 362 mm	100 g < 150 kg > 200 g 321 x 60 x 356 mm	1 kg 303 x 118 x 470 mm
Dimensions/platform					
(WxHxD) Cable length	560 x 55 x 560 mm 2.3 m	288 x 60 x 278 mm 2 m	288 x 60 x 280 mm	288 x 60 x 278 mm	265 x 70 x 265 mm
Weight	14.4 kg	4.5 kg	4.1 kg	4.2 kg	3.5 kg
Power supply	Batteries.	Batteries,	Batteries,	Batteries	3
Approval class	power adapter optional	power adapter optional	power adapter optional	Batteries	(11)
Functions TARE	•	•			
Pre-TARE	•				
Mother/child function HOLD		•	•	•	
Auto-HOLD	•	•	•		
BMI	•	•			
Auto-CLEAR Auto weighing range switch-over	•				
Reset-to-zero function Damping	•				•
RESET	•				
Automatic switch-off	•	•	•	•	
SEND/auto-SEND	•				
PRINT/auto-PRINT	•				
Tip-on automatic switch-on				•	
Transport castors	•				
RS232 compatible	•				
Optional Measuring rod Stand for cable remote display	seca 472	seca 217	seca 217	seca 217	
Adapter element Power adapter	seca 447, seca 400	seca 437 seca 447, seca 400	seca 437 seca 447, seca 400	seca 437	
Carrying case	, 11, 12, 13,	seca 414, seca 421	seca 414, seca 415	seca 414, seca 415	
Areas of application Mobile weighing		•	•	•	
System compatible with					
seca 360° wireless	seca 466, seca 465, seca 456, seca analytics 115, seca emr flash 101, seca 274, seca 264				

Accessories for measuring stations, column and flat scales

Accessories ioi	measuring stati	ions, column and	i liat scales							
T	66 0123	€ 0123	9	*	*	***************************************				new
	seca 224	seca 220	seca 472	seca 437	seca 460	seca 447	seca 400	seca 414	seca 421	seca 415
	Telescopic measuring rod for seca column scales.	Telescopic measuring rod for seca column scales.	Stand for display elements of seca scales with cable remote displays.	Adapter element for the flat scales seca 899, seca 877 and seca 878 for combination with seca 217.	RS232 interface for transmitting data to the serial interface of a PC or printer for seca 764.	Power adapter for seca 704, seca 799, seca 635, seca 899 and seca 878.	Switch-mode power adapter for column and flat scales seca 704, seca 799, seca 635, seca 899 and seca 878.	Case for flat scale seca 899, seca 878 and seca 877 together with stadiometer seca 217 and adapter element seca 437.	Stable and roomy carrying case for the flat scale seca 899.	Carrying case for the flat scales seca 878 and seca 877.
	Page 48	Page 48	Page 53	Page 53	Page 44	Page 47	Page 47	Page 53	Page 53	Page 57
Technical data										
Measuring range	60-200 cm	60-200 cm								
Graduation	1 mm	1 mm								
Dimensions (WxHxD)	55 x 1,480 x 286 mm	55 x 1,480 x 286 mm	460 x 1,035 x 460 mm	333 x 86 x 310 mm	100 x 25 x 60 mm	50 x 40 x 75 mm	42 x 35 x 73 mm	625 x 350 x 210 mm	430 x 350 x 130 mm	330 x 380 x 70 mm
Cable length					0.3 m + 1.2 m	1.85 m	1.85 m			
Weight	1.4 kg	696 g	7.8 kg	600 g	122 g	310 g	155 g	2.8 kg	810 g	800 g



Height measuring systems

Height measuri	ing systems							
§ §	seca 274	seca 264	seca 217	seca 213	seca 222	seca 216	seca 206	seca 201
	Wireless stadiometer, free standing with seca Frankfurt Line and heel positioner for precise measurements.	Wireless stadiometer for wall mounting with easy-to-clean floor mat.	Stand-alone stadiometer for height measurement, with spacer, consisting of parts that fit together perfectly for transport ease.	Stand-alone stadiometer for height measurement, easily assembled for convenient transport.	Telescopic measuring rod for the wall with extrawide measuring slides and heel stop.	Mechanical stadiometer. Head piece with locking screw for accuracy.	Roll-up measuring tape with wall attachment.	Ergonomic, smoothly extractable measuring tape for determining body circumference.
Page 58-65	Page 60	Page 61	Page 62	Page 63	Page 63	Page 64	Page 65	Page 65
Technical data								
Measuring range	30-220 cm	30-220 cm	20-205 cm	20-205 cm	6-230 cm	max. 138 cm selectable from 3.5-230 cm	0-220 cm	0-205 cm
Graduation	1 mm	1 mm	1 mm	1 mm	1 mm	1 mm	1 mm	1 mm
Dimensions (WxHxD)	434 x 2,394 x 466 mm	428 x 2,318 x 474 mm	328 x 2,145 x 574 mm	337 x 2,165 x 590 mm	308 x 2,320 x 286 mm	120 x 1,500 x 217 mm	125 x 125 x 173 mm	70 x 22 x 65 mm
Dimensions/platform (WxHxD)	430 x 60 x 365 mm	430 x 3 x 370 mm						
Dimensions when folded (WxHxD)				337 x 177 x 624 mm	308 x 1,320 x 286 mm			
Weight	15 kg	5 kg	3.6 kg	2.4 kg	1.1 kg	1.7 kg	202 g	50 g
Power supply	Batteries	Batteries						
Functions								
HOLD	•	•						
User-defined zero setting	•	•						
Backlighting Acoustic signals can	•	•						
be activated RESET	•	•						
Calibration/								
automatic calibration	•	•						
Automatic switch-off	•	•						
RS232 compatible	•	•						
SEND/auto-SEND	•	•						
PRINT/auto-PRINT	•	•						
Transport castors Optional	•							
Adapter element			seca 437					
Carrying case			seca 414	seca 412				
Areas of application								
Can be mounted		•			•	•	•	
Mobile measuring			•	•				•
System compatible with								
seca 360° wireless	seca 466, seca 465, seca 456, seca analytics 115, seca emr flash 101, seca mBCA 515, seca 704, seca 635, seca 645, seca 685, seca 677, seca 665, seca 657, seca 959	seca 466, seca 465, seca 456, seca analytics 115, seca emr flash 101, seca mBCA 515, seca 704, seca 635, seca 645, seca 685, seca 677, seca 959						



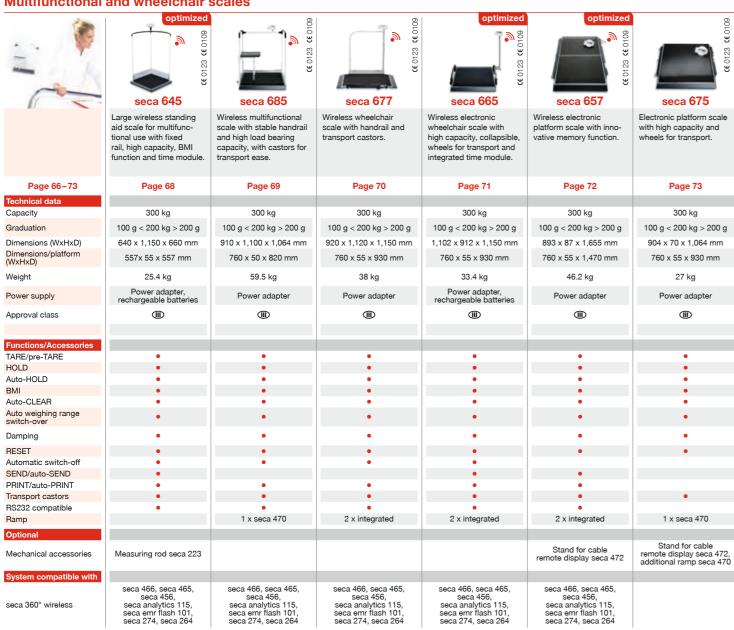






la la			
6 100 m	seca 437	seca 414	seca 412
	Adapter element for stadiometer seca 217 in combination with flat scales seca 899, seca 878 and seca 877.	Case for stadiometer seca 217 together with flat scale seca 899, seca 878 or seca 877 and adapter element seca 437.	Case for mobile stadiometer seca 217 and seca 213.
	Page 62	Page 62	Page 63
Technical data			
Dimensions (WxHxD)	333 x 86 x 310 mm	625 x 350 x 210 mm	686 x 427 x 56 mm
Weight	600 g	2.8 kg	650 g

Multifunctional and wheelchair scales



Accessories for multifunctional and wheelchair scales and bed and dialysis scale

seca 360° wireless



Chair scales

	seca 959	seca 956
	Wireless chair scale with fine graduation, swiveling armrests, adjustable foot- rests and BMI function.	Electronic chair scale with fold up armrests and footrests.
Page 74-75	Page 74	Page 75
Technical data		
Capacity	300 kg	200 kg
Graduation	50 g < 150 kg > 100 g 100 g < 250 kg > 200 g	100 g
Dimensions (WxHxD)	563 x 897 x 978 mm	563 x 897 x 956 mm
Weight	24.5 kg	22.4 kg
Power supply	Power adapter, rechargeable batteries	Batteries
Approval class		
Functions TARE		
Pre-TARE	•	
HOLD	•	•
Auto-HOLD	•	
BMI	•	
Auto-CLEAR	•	
Auto weighing range switch-over	•	
Damping	•	
RESET	•	
Automatic switch-off SEND/auto-SEND	•	•
PRINT/auto-PRINT		
RS232 compatible	•	
System compatible with	seca 466, seca 465,	
seca 360° wireless	seca 456, seca analytics 115, seca emr flash 101,	

Bed and dialysis scale

bed and dialysi	s scale
	seca 985 Electronic bed and dialysis scale with integrated mechanical lifters and equipment trolley.
	Page 76
Technical data	
Capacity	500 kg
Max. patient weight	250 kg
Graduation	100 g < 200 kg > 200 g
Dimensions/cart (WxHxD)	520 x 927 x 562 mm
Dimensions/load cells (WxHxD)	328 x 150 x 212 mm
Weight	25.6 kg (load cells + cart)
Power supply	Power adapter, rechargeable batteries
Approval class	(11)
Functions/Accessories	
TARE/pre-TARE	•
HOLD	•
BMI	•
Lower limit value Damping	
Бапрпід	
Optional	
RS232 interface	seca 460



Organ and diaper scale



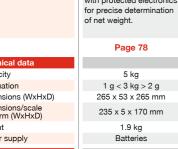


seca 856

Organ and diaper scale with protected electronics

Capacity Graduation Dimensions (WxHxD) Dimensions/scale platform (WxHxD) Weight

Power supply TARE/pre-TARE HOLD



Digital portion and diet scale



BMI calculator

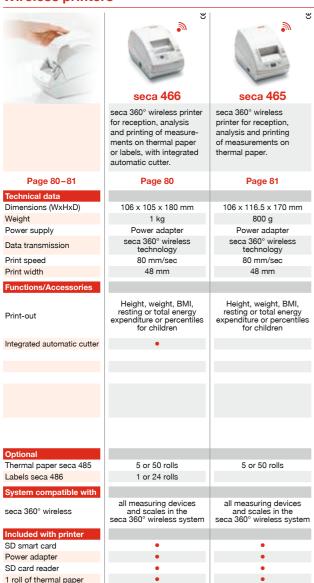




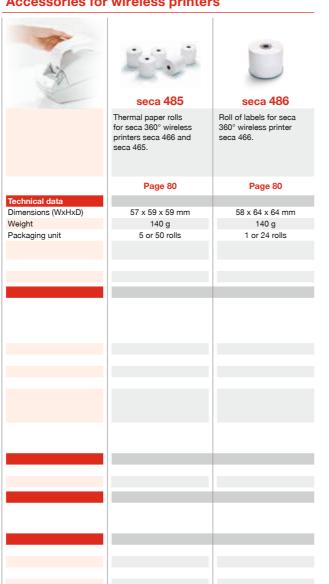
Wireless printers

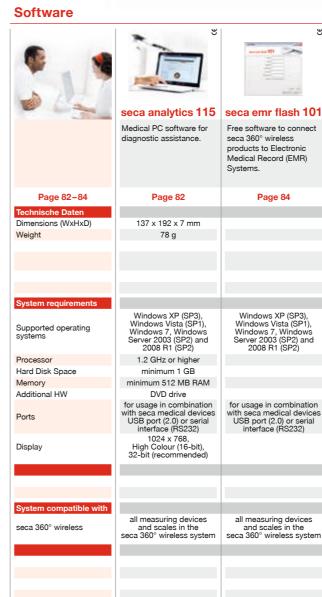
Automatic switch-off

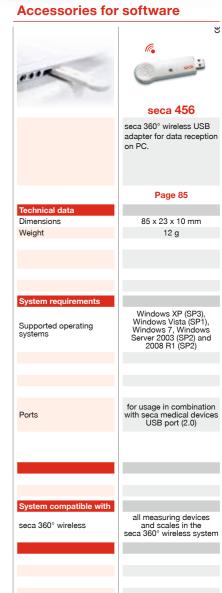
1 roll of labels



Accessories for wireless printers







day of complete rest, at room temperature and

with an empty stomach, in order to keep the

REE

BMI

BIVA

BCC

EMR

HL7, GDT

Hydration: the ratio of extracellular water to intracellular water.

Impedance (Z), These represent the raw data from the bioelec-Phase angle (φ), trical impedance analysis that can be used for medical studies. This includes the impedance, the Resistance (R). Reactance (Xc) phase angle and the two impedances, resistance and reactance

> Body Mass Index: the unit of measurement for the analysis of body weight in relation to a person's height, calculated using the formula (weight in kg/height in m)2.

Bioelectrical Impedance Vector Analysis: the way in which the BIVA is presented enables analysis of hydration and cell mass.

Body Composition Chart: the Body Composition Chart developed by seca shows the measurement points of the fat mass index in a coordinate system and helps to determine body composition.

Electronic Medical Record: these are information systems that are used in hospitals to record and present patient information.

These are recognized data formats needed by most EMR systems to process patient data.

Scales bearing this symbol comply with the strict stringent of Class III or IIII of the rements which are subject to calibration.

directive and can be used for medical measu

Products which bear this symbol fulfill the Council Directive 2009/23/EC concerning non-automatic weighing instruments

the European standard DIN EN 45501 concerning metrological aspects of non-automatic weighing instruments

the Council Directive 93/42/EWG concerning medical devices

We are anxious to preserve our natural resources. This is why we strive to save packaging material where practical. And what is left over can be conveniently disposed of locally via Germany's Dual System recycling

seca technical terms - a brief explanation.

Measuring systems and scales:

TARE function

Useful when any additional weight (e.g. diapers or blankets of babies/small children and also chairs or wheelchairs) is not to be included in the result. First. this additional weight is measured and then the display is reset to zero. The weight of this object is then disregarded at the next weighing.

Pre-TARE function When activated, a previously stored value is automatically deducted from the currently measured weight. For example, when caregiver and patient stand on the scales together and only the weight of the patient is to be shown.

Intake-Function

BMIF-Breast-Milk- The amount of milk taken by a baby when being breastfed can be ascertained with the aid of the Breast-Milk-Intake-Function. At the touch of a button. the weight of the baby determined before feeding is stored and then deducted from the weight determined after feeding (difference function).

Mother/childfunction

This function was developed to enable the weighing of children in the arms of their parents. When the mother/child-function is activated, the previously stored weight of the adult is deducted from the currently determined value. The display then shows only the weight of the child, with an accuracy of down to 50 g.

HOLD. Auto-HOLD

Once the weight has been saved with a press of the HOLD key, it remains in the display after the patient has left the scale. This function lets the doctor or nurse care for the patient first and then record the weight. When the Auto-HOLD function is activated, the HOLD function is automatically triggered as soon as the weight has stabilized.

BMI function

The Body Mass Index correlates height and weight to one another. A tolerance zone considered to be ideal from a health point of view is between 18.5 and 24.9. If the value is higher or lower, medical advice should be obtained.

The Body Fat Rate compares the patient's percentage of fat with an ideal value. Body height and weight are the basis of calculation; extra consideration is given to gender

Patient data input Data such as gender, age and PAL (Physical Activity Level) can be entered via the input key on the multifunction touch display of the seca 284. Together with the height and weight measurements, the data are wirelessly transmitted to the seca 360° wireless printer, where they are used to calculate the resting energy expenditure and total energy expenditure or percentiles for children and teenagers.

CLEAR, Auto-**CLEAR** function

Old measurements or patient data can lead to incorrect calculations. Therefore, the CLEAR function deletes results from previously measured patients. It can be activated manually or automatically with Auto-CLEAR after five minutes.

Limit value function

For effective monitoring of patients, one can preset a weight limit and an alarm rings if this is exceeded.

Weighing range switch-over, auto weighing range switch-over

seca scales with a multi-range function let you quickly switch manually from one range to another. From a fine graduation at low capacity in scale range 1 to maximum capacity in scale range 2.

Damping function

The damping function makes it possible to determine the precise weight in spite of disturbances during the weighing process, e.g. caused by the patient moving. The degree of damping can be adjusted as required before weighing a patient: the stronger the damping. the less sensitively the scales react to the movements during the weighing process.

RESET function

The RESET function restores the factory settings.

SEND. Auto-SEND function

At the press of a button, all measurements and input data are wirelessly transmitted to receive-ready devices such as a scale with a corresponding BMI function, a wireless printer, a PC with the software seca emr flash 101 or software seca analytics 115. When the Auto-SEND function is activated, the SEND function is automatically triggered when the weight on the scale has stabilized or height measurements have been confirmed.

PRINT-, Auto-PRINT-function

With the PRINT function the measurements and input data are wirelessly transmitted to a seca 360° wireless printer, where they are processed and printed. When the Auto-PRINT function is activated, the PRINT function is automatically triggered when the weight on the scale has stabilized or height measurements have been confirmed.

The products in this catalog with the label CF0123 or CF0109 comply with the Council Directive 93/42/EWG concerning medical devices and Council Directive 2009/23/ EC concerning non-automatic weighing

The seca mBCA:

Medical Body Composition Analyzer: a device

of a person's body composition.

proportion of the body weight.

weight minus the fat mass

used to move the body.

in the human body.

in the human body.

substances dissolved therein.

does not consist of bone or fat.

mass

that provides a medically precise measurement

Bioelectrical Impedance Analysis: a method of

measuring the resistance of the body and its parts

Fat Mass: the fat mass defines the amount of body

Fat-Free Mass: the fat free mass is the total body

Fat Mass Index: this index measures the proportion of

body fat based on the height, weight and fat mass.

Fat-Free Mass Index: this is a measurement of the

muscle definition of a human body. The measure-

ment is based on the body height, weight and fat-free

Skeletal Muscle Mass: this includes all the muscles

that are attached to the skeleton or - by extension -

Total Body Water: the sum of the fluids outside

and inside the cells of the body, not including the

Extracellular Water: all fluids found outside the cells

Intracellular Water: all fluids found inside the cells

Lean Soft Tissue: this includes all body tissue that

fat in kg as an absolute mass and in % as the relative

analyzing body composition. This involves

to a weak alternating electrical current.

mBCA

BIA

FFM

FMI

FFMI

SMM

TBW

ECW

ICW

LST



Products that bear this symbol fulfill the Council Directive 93/42/EWG concerning medical devices



calibratable scales.

The professionalism of seca is also officially recognized. The TÜV SÜD Product Service GmbH, the responsible body for medical products, certifies that seca complies with the strictest legal requirements applicable to a medical product manufacturer. The quality assurance system at seca includes the areas of Design and Development, Production,

Scales that bear this symbol conform to

the European scale Directive 2009/23/EC

and the European standard DIN EN 45501

concerning metrological aspects of nonauto-

matic weighing instruments, seca scales with

this symbol comply with the stringent quality

and technical requirements applicable to

measuring instruments, software and measurement systems for the assessmen of health status and nutritional condition. Moreover, seca is authorized to carry out the FC initial calibration of medical scales

Sales and Service of medical scales, height

100 • seca technical terms • 101



the brand of the medical field.

t seca, we have been understanding medicine since 1840. That is a long time. It is also very important to us, as it is our understanding that enables us to find answers. Only through understanding can we develop products that will provide doctors, nurses, and other health care professionals with effective support for their work. And we also care about the patient's well-being.

Experience









Quality





seca nihon seca middle east

seca schweiz seca austria seca polska seca suomi

Progress

Experience is valuable if it gives birth to understanding.

- The same process since 1840: develop - question - improve
- Continuous development thanks to our own production sites
- Many years of dedication and expertise in the fight against widespread disease such as chronic obesity

Innovation means thinking outside the box.

- seca products are an integral part of the process of diagnosis and therapy
- More than just products: system solutions for simple integration of data into any EMR system
- Intelligent details make working with patients easier
- The prerequisite for innovation: an in-house development department
- Multi-award winning design











International outlook

High quality proves itself over time.

- · A secure investment: long service life
- Precise measurement under difficult conditions
- Global quality management to local national standards
- · All-around service, also after purchasing
- Exclusive authorization from governing bodies to certify our own products

If you know the world, you know how the world works.

- The world market leader in medical measuring and weighing
- Products exported to more than 110 countries
- · Knowledge of markets and routine medical work in different countries thanks to local subsidiaries and partners
- Used everywhere: from the most advanced clinics to development aids

102 • The brand of the medical field • 103



seca and art

See the world through our eyes.

That's the way artists have thought since art began and the way we have thought since seca was founded. It is no wonder that art has grown into an important source of inspiration over our 170 years of existence. It throws up new questions, leads to new perspectives and opens up apparently distant horizons – for our products too. But seca would not be seca if we did not invite you to take part. That's why we commissioned the renowned media artist Christina Lissmann of Berlin five years ago to create an image portfolio for us that reflected the philosophy of our brand. With scenes featuring seca product portraits that transport the viewer into an aesthetically pleasing world. Where fantasy is let free and space opens up for rethinking, challenging the conventional and finding new paths to explore. Welcome to the seca world and to the world of art, where there are absolutely no limits.