

# seca mBCA 514

## medical Body Composition Analyzer



- Fast and easy assessment of body composition, e.g., fat mass and body water.
- Six modules for varied analysis of measurement data.
- Medically precise, validated against gold standard measurement results.
- Network-compatible with seca 360° wireless technology.
- Simple and convenient entry and read-out of results on swiveling touch-screen display.
- Electrodes on handrail give patients a firm stance and ensure reproducible results.
- Integrated scale with a weighing capacity of up to 660 lbs.



## seca mBCA 514:

A body composition analyzer that delivers medically precise results.

The medical Body Composition Analyzer (mBCA) from seca breaks down weight into several compartments that are important for medical purposes. The seca mBCA 514 is a medical body composition analyzer validated against the gold standard recognized by medical science.



### Technical Data

#### General

Dimensions (WxHxD)	38.43 x 49.25 x 32.6 inch
Weight	80 lbs
Display	8.4" Touch-screen display, can be rotated 360°
Power supply	Power adapter
Voltage	100 V–240 V
Power frequency	50 Hz–60 Hz
Interfaces	seca 360° wireless technology, USB 2.0, Ethernet
Compatible printers	seca 360° wireless, laser printer and inkjet printer via PC software seca analytics 115

#### Bioelectrical Impedance Analysis

Measurement method	8-point Bioelectrical Impedance Analysis
Type of electrode	Stainless steel, three (3) pairs of hand electrodes, two (2) pairs of foot electrodes
Measurement frequencies	1; 1.5; 2; 3; 5; 7.5; 10; 15; 20; 30; 50; 75; 100; 150; 200; 300; 500; 750; 1,000 kHz
Measurements	Impedance (Z), Resistance (R), Reactance (Xc), Phase angle (φ)
Phase angle measurement range	0° to 20°
Measurement range Impedance	10 Ω to 1,000 Ω
Measurement segments	Right arm, left arm, right leg, left leg, right half of body, left half of body, torso
Measurement current	100 μA
Measurement time	All modes at frequencies of 5 kHz and 50 kHz (max. 20 seconds) All modules at all frequencies (max. 90 seconds)

#### Technical data for scale

Capacity	Weighing range 1 = 330 lbs Weighing range 2 = 660 lbs
Fine graduation	Weighing range 1 = 0.1 lbs Weighing range 2 = 0.2 lbs

#### Information

This device is equipped with a wireless module which permits wireless transmission of measurements for analysis and documentation purposes.

Data can be transmitted to the following devices:

- seca 360° wireless printer
- PC with seca USB wireless module

The device can receive data from the following devices:

- seca measuring rods and measuring stations in the seca 360° wireless system
- PC with seca USB wireless module

#### Accessories

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



# seca analytics 115

medical PC software for  
professional body  
composition analysis



- PC software to supplement seca mBCA.
- For wireless reception of measurements from all seca 360° wireless devices.
- Offers additional cardio-metabolic risk module, trend analysis and much more.
- Creates graphic presentation of examination results for screen display or printout.
- Configurable software interface for integration in Electronic Medical Record (EMR) system (EMR-integrated).

## seca analytics 115:

Easy to integrate in hospital, medical practice and all Electronic Medical Record (EMR) systems.

The PC software seca analytics mBCA 115 adds several functions to the seca mBCA. With these functions data and measurements can be integrated in almost any Electronic Medical Record (EMR) system and formatted in a clear printout for the doctor to use in a patient consultation.



product sheet (seca analytics 115)

### All the advantages of the seca analytics 115 at a glance

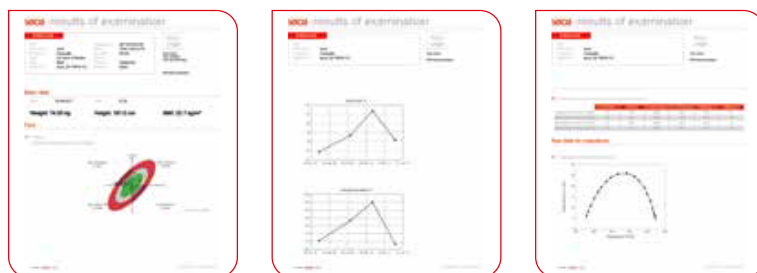
- Set up your PC so that it can wirelessly receive the measurements of the seca mBCA and other seca 360° wireless devices.
- Acquire the Cardiometabolic risk and the detailed Raw impedance data module for science and research, additional interpretation options, trend curves and the therapy planner.
- Generate easy-to-understand graphic presentations and print them out for your files or for your patients.
- Store all patient and examination data in a central seca database.
- Take the first step toward electronic medical records with EMR integrated.
- With the necessary security, thanks to simple user account management and access rights.

### Scientifically sound:

The seca mBCA and the PC software seca analytics 115 consider the following reference values for the analysis and interpretation of measurements:

- **Total Body Water (TBW):** seca 2011
- **Extracellular Water (ECW):** seca 2011
- **Fat Mass (FM):** Gallagher et al. 2000
- **Fat-Free Mass (FFM):** seca 2011
- **Bioelectrical Impedance Vector Analysis (BIVA):** Piccoli et al. 1994 (illustration), seca 2011 (reference values)
- **Fat Mass Indices (FFMI/FMI):** Piccoli et al. 1994 (illustration), seca 2011 (reference values)
- **Skeletal Muscle Mass (SMM):** Kim et al. 2002
- **Percentile charts for children:** Centers for Disease Control and Prevention (CDC) 2000, World Health Organization (WHO) 2007, Kromeyer-Hauschild et al. 2001

- **Waist circumference for children:** Fernandez et al. 2004, Inokuchi et al. 2007
- **Resting energy expenditure for children:** Müller et al. 2004
- **Resting energy expenditure for adults:** Müller et al. 2004, Liu et al. 1995, Food and Agriculture Organization of the United Nations (FAO)/WHO/United Nations University (UNU) 2004
- **Metabolic syndrome:** International Diabetes Federation (IDF) 2006, National Cholesterol Education Program – Adult Treatment Panel III (NCEP-ATP III) 2001
- **10-year risk of coronary heart disease:** Framingham Score, Wilson et al. 1998, Prospective Cardiovascular Münster (PROCAM) Assmann et al. 2002, SCORE Conroy et al. 2003



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

## seca analytics 115

### System requirements

- Supports operating systems: Windows XP (SP3), Windows Vista (SP1), Windows 7, Windows Server 2003 (SP2) and Windows Server 2008 R1 (SP2)
- Processor: 1.2 GHz or higher
- Required available hard disk space: minimum 1 GB
- Required available RAM: minimum 512 MB RAM
- Peripherals: DVD drive
- Ports: For use with seca devices USB 2.0 or serial interface (RS232)
- Monitor: 1024x768, High Color (16-bit), 32-bit (recommended)

