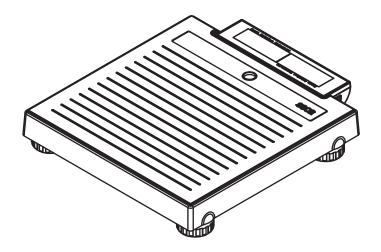
seca 878

Instructions for Use





CONTENTS

1. Device description	. 3
1.1 Intended use	3
1.2 Description of function	
1.3 User qualification	
2. Safety precautions	. 3
2.1 Safety precautions in these instructions for	
use	
2.2 Basic safety instructions	
Handling the device	
Preventing electric shock	
Preventing injuries and infections	
Preventing device damage	
Using the measured results	
Dealing with packaging	. 6
2.3 Handling batteries and battery packs	7
3. Overview	. 8
3.1 Controls	
3.2 Symbols in the display	
3.3 Marking on device and on the rating	
plate	С
3.4 Identification on the packaging	
4. Before you really get started	
4.1 Scope of delivery	
4.2 Establishing power supply	
Inserting battery	
Connect the power supply unit (optional)	
4.3 Setting up and aligning scale	. 11

5. Operation 11
5.1 Weighing
Switching off the scale
6. Hygiene treatment 12 6.1 Cleaning 13 6.2 Disinfecting 13 6.3 Sterilizing 13
7. Function check
8. What do I do if?
9. Maintenance/Verification 14
10. Technical data 15 10.1 General technical data 15 10.2 Weighing technology data 15
11. Optional accessories
12. Disposal 16 12.1 Device 16 12.2 Batteries and battery packs 16
13. Warranty
14. Declaration of conformity 16

1. DEVICE DESCRIPTION

1.1 Intended use

The electronic personal scale is mainly used at hospitals, practices and inpatient care facilities in accordance with national regulations.

The scale is for conventional determination of weight and establishment of general state of nutrition; it assists the physician supervising treatment in making a diagnosis or deciding on a course of treatment.

To make an accurate diagnosis, however, other specific examinations have to be ordered by the physician and their results taken into account, in addition to determining a weight value.

1.2 Description of function

On the **seca 878** electronic personal scale, weight is detected by four load cells.

The **2 in 1** function can be used to determine the weight of babies and toddlers. The child is held in an adult's arms during weighing to do so.

1.3 User qualification

The device may only be operated by healthcare professionals.

2. SAFETY PRECAUTIONS

2.1 Safety precautions in these instructions for use



DANGER!

Used to identify an extremely hazardous situation. If you fail to take note of this information, serious irreversible or fatal injuries will occur.



WARNING!

▲ Used to identify an extremely hazardous situation. If you fail to take note of this information, serious irreversible or fatal injuries may result.



CAUTION

Used to identify a hazardous situation. If you fail to take note of this information, minor to moderate injuries may result.

NOTICE!

Used to identify possible incorrect usage of the device. If you fail to take note of this information, you may damage the device, or the measuring results may be incorrect.

NOTE

Includes additional information about use of the device.

Handling the device

- ▶ Please take note of the information in these instructions for use.
- ► Keep the instructions for use in a safe place. The instructions for use are a component of the device and must be available at all times.

\triangle

DANGER!

Risk of explosion

Do not use the device in an environment in which one of the following gases has accumulated:

- oxygen
- flammable anesthetics
- other flammable substances/air mixtures



CAUTION!

Patient hazard, damage to device

- ► Have servicing and verification carried out regularly as described in the relevant section of this document.
- ➤ Technical modifications may not be made to the device. The device does not contain any parts for servicing by the user. Only have servicing and repairs performed by an authorized seca Service partner. You can find service partners in your area at www.seca.com or by sending an e-mail to service@seca.com.
- ► Only use original seca accessories and spare parts, otherwise seca will not grant any warranty.



CAUTION!

Patient hazard, malfunction

- ► Keep other electrical medical devices, e.g. high-frequency surgical devices, a minimum distance of approx. 1 meter away to prevent incorrect measurements or wireless transmission interference.
- ► Keep HF devices such as cell phones a minimum distance of approx. 1 meter away to prevent incorrect measurements or wireless transmission interference.
- ➤ The actual transmission output of HF equipment may require minimum distances of more than 1 meter. Details can be found at www.seca.com.

Preventing electric shock



WARNING!

Electric shock

- Set up the device so that the power supply socket is easy to reach and the device can be disconnected from the power supply quickly.
- ► Ensure that your local power supply matches the information on the power supply unit.
- ▶ Do not touch the power supply unit with wet hands.
- ▶ Do not use extension cables or power strips.
- ▶ Make sure that cables are not pinched or damaged by sharp edges.
- ▶ Make sure that cables do not come into contact with hot objects.
- Do not operate the device at an altitude of more than 3000 m above sea level.

Preventing injuries and infections



WARNING!

Injury from falls

- ► Ensure that the device is positioned firmly and level.
- Route connecting cables (if present) in such a way that neither user nor patient can trip over them.

- ► The device is not designed as a standing aid. Assist people with limited motor skills when they are getting up, e.g. from a wheelchair.
- ► Make sure that the patient does not step onto and off the weighing platform right at the edges.
- ► Make sure that the patient steps onto and off the weighing platform slowly and safely.

\triangle

WARNING!

Danger of slipping

- ► Ensure that the weighing platform is dry before the patient steps onto it.
- ► Ensure that the patients feet are dry before he or she steps onto the weighing platform.
- ► Make sure that the patient steps onto and off the weighing platform slowly and safely.



WARNING!

Risk of infection

- ▶ Before and after every measurement, wash your hands to reduce the risk of cross-contamination and nosocomial infections.
- ► Hygienically reprocess the device regularly as described in the respective section in this document.
- ▶ Make sure that the patient has no infectious diseases.
- ► Make sure that the patient has no open wounds or infectious skin alterations, which may come into contact with the device.

Preventing device damage

NOTICE!

Damage to device

- Ensure that no liquids enter the device. They can damage the electronics.
- Switch off the device before disconnecting the power supply unit from the mains socket.
- ➤ For devices with power supply operation: Disconnect the power supply unit from the mains socket if you intend to not use the device for a longer period of time. Only this way it can be ensured that the device is de-energized.
- ➤ For devices with battery or rechargeable battery operation: If you do not use the device for an extended period of time, remove batteries or rechargeable batteries. Only this way it can be ensured that the device is de-energized.
- ► Make sure not to drop the device.
- ▶ Do not expose the device to any impacts or vibrations.
- ► Perform function controls regularly as described in the relevant section in this document. Do not operate the device if it is damaged or not working properly.
- ► Ensure that there is no heat source in the immediate vicinity. Do not expose to direct sunlight. The excessive temperature could damage the electronics.
- ➤ Avoid rapid temperature fluctuations. When the device is transported so that a temperature difference of more than 20 °C occurs, it must stay turned off for at least 2 hours before it can be turned on again. Otherwise, condensation water will form which can damage the electronics.
- ▶ Use the device only in intended ambient conditions.
- ▶ Store the device only in the intended storage conditions.
- ► Use only chlorine and alcohol-free disinfectants which are explicitly suitable for acrylic sheet and other sensitive surfaces (active ingredient: quaternary ammonium compounds, for example).

- ▶ Do not use aggressive or abrasive cleaning agents.
- ▶ Do not use organic solvents (e.g. white spirit or petroleum spirit).

Using the measured results



WARNING!

Patient hazard

This device is **no** diagnostic device. It simply assists the treating physician in establishing a diagnosis.

- ▶ In order to make a precise diagnosis and initiate therapeutic measures, besides determination of the weight, further targeted examinations must be set up by the physician, and their results must be considered.
- ► The responsibility for diagnosis and treatment lies with the treating physician.

NOTICE!

Inconsistent measuring results

- ▶ Before you electronically save measured values determined using this device and use them further (e.g. in seca PC software or in a hospital information system), make sure that the measured values are plausible.
- ▶ If measured values are transmitted to seca PC software or a hospital information system, make sure prior to further use that the measured values are plausible and are assigned to the correct patient.

Dealing with packaging



WARNING!

Risk of suffocation

Packaging material made of plastic foil (bags) is a choking hazard.

- ► Keep packaging material out of reach of children.
- ▶ In the event that the original packing material may not be available anymore, only use plastic bags with security holes in order to reduce the risk of suffocation. Use recyclable materials if possible.

NOTE

Keep the original packing material for future use (e.g. returning for servicing).

2.3 Handling batteries and battery packs

seca devices are supplied with a rechargeable battery pack or with batteries depending on model. Heed the following safety instructions.



WARNING!

Personal injury as a result of improper handling

Batteries and rechargeable batteries contain harmful substances which may explode if not handled properly.

- ▶ Do not try to recharge batteries.
- ▶ Do not expose (rechargeable) batteries to heat.
- ▶ Do not burn (rechargeable) batteries.
- ► If acid is leaking out, avoid contact with the skin, eyes and mucous membranes. Rinse affected areas with plenty of clean water and seek medical help at once.

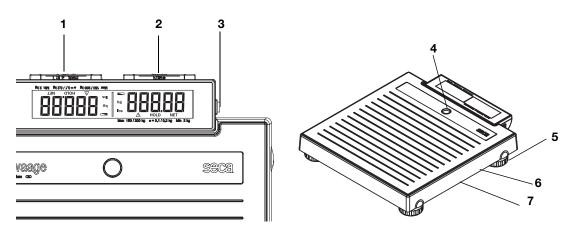
NOTICE!

Damage to device and malfunctions with improper handling

- ► Only use the type of (rechargeable) battery specified in this document.
- ► When replacing (rechargeable) batteries, always replace a complete set at a time.
- ► Do not short-circuit (rechargeable) batteries.
- ▶ If you do not use the device for a long period of time, remove the batteries (incl. rechargeable batteries). This prevents acid from leaking into the device.
- If acid leaked into the device, discontinue use. Have the device checked by an authorised seca Service partner and repaired if necessary.

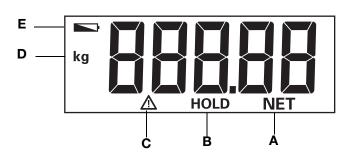
3. OVERVIEW

3.1 Controls



No.	Control	Function	
		Activating the hold function	
1	hold/ 2 in 1 key	 Starting the 2 in 1 function to weigh babies and 	
		toddlers	
2	start key	Starting the weighing function	
3	On/off switch	Switching the scale on and off	
4	Spirit level	Shows whether the device is horizontal	
5	Foot screw	4 pcs, for precise alignment	
6	Power supply	For connecting a power supply unit available as an	
0	connection	option	
7	Battery	Takes 6 AA type betteries 1.5 V	
′	compartment	Takes 6 AA-type batteries, 1.5 V	

3.2 Symbols in the display



	Symbol	Meaning	
Α	NET	Tare function active	
В	HOLD	Hold function active	
С	\triangle	Non-verifiable function active	
D	kg/g	Weight value in kilograms/grams	
E	ĺ	Batteries are low	

3.3 Marking on device and on the rating plate

Text/symbol	Meaning	
•••	Name and address of manufacturer, date of manufacture	
REF	Model number	
SN	Serial number, consecutive	
GAL	Value in m/s² (verified models) • Gravitational acceleration on earth • Depends on the intended location	
ProdID	Product identification number, consecutive	
Approval Type	Type designation of design approval	
<u> </u>	Follow instructions for use	
☆	Electrical medical device, type B	
е	Value in mass units (verified models) • Gives the difference between two consecutive display values • Used to classify and verify a scale	
→ x ←	Weighing range (verified models)	
(€ M18 0102 0123	Device complies with EU standards and directives. M: Conformity label according to Directive 2014/31/EU governing non-automatic weighing instruments (verified models) 18: (Example: 2018) Year in which the declaration of conformity was completed and the CE symbol was applied (verified model) 0102: Notified body metrology (verified models) 0123: Notified body medical products	
	Class III scale to Directive 2014/31/EU and OIML R76-1	
x-y V == max. xxx mA use compatible seca adapter only	Rating plate on the power supply connection socket • xx V: required supply voltage • max xx A: maximum current consumption •: note polarity of device plug. •: operate device with direct current	
<u> </u>	Do not dispose of device with household waste	

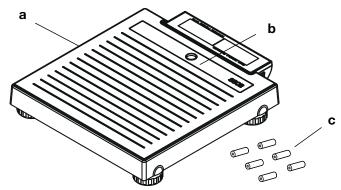
3.4 Identification on the packaging

*	Protect from moisture
<u>11</u>	Arrows indicate top of product. Transport and store in an upright position.
	Fragile Do not throw or drop.
*	Permitted min. and max. temperature for transport and storage
Ø	Permitted min. and max. moisture for transport and storage

11	Open packaging here
•	Packaging material can be disposed of through recycling programs

4. BEFORE YOU REALLY GET STARTED ...

Scope of delivery

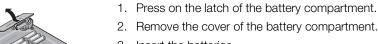


No.	Component	Pcs.
а	Personal scale	1
b	Interchangeable design panel	1
С	Battery	6
-	"Changing design panel" flyer	1
-	Operating instructions	1

4.2 Establishing power supply

Inserting battery

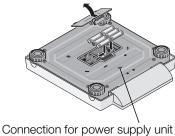
You need 6 AA-type batteries, 1.5 V (included in the scope of delivery).





Ensure the correct polarity of the batteries (markings in the battery compartment). If the display bath appears, you have inserted one of the batteries the wrong way round or the batteries have discharged.

4. Close the battery compartment.



Connect the power supply unit (optional)

The scale can be operated with a power supply unit (accessory).



WARNING!

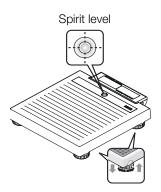
Using the wrong power supply units may cause bodily injury or damage to the device

Conventional power supply units may deliver a higher voltage than is indicated on them. The scale may overheat, catch fire, melt or short-

- ► Use only original seca plug-in power supply units with controlled 12 V output voltage.
- 1. Insert the plug required for your power supply into the power supply unit.

- 2. Insert the connector of the power supply unit into the connecting socket of the scale.
- 3. Plug the power supply unit into a power supply socket.

4.3 Setting up and aligning scale



- 1. Place the scale on a firm surface.
- Align the scale by turning the foot screws.
 The air bubble in the spirit level must be located in the exact center of the circle.
- 3. Ensure that only the feet of the scale are in contact with the ground. The scale may not be in contact anywhere else.

NOTE:

The alignment of the base of the scale must be checked every time the scale is moved and corrected if required.

5. OPERATION

5.1 Weighing

Starting the weighing procedure



- 1. Ensure that there is no load on the scale.
- 2. Press the **start** key.

SECR appears in the display, then all the elements of the display are shown briefly.

The scale is operational when 20 appears in the display. If the scale is operated with a power supply unit, the \forall symbol appears in the display.

- 3. Stand on the scale and keep still.
- 4. Read off the measured result.

Weighing babies/toddlers (2-in-1)

The **2 in 1** function can be used to determine the weight of babies and toddlers. The child is held in an adult's arms during weighing to do so. Proceed as outlined below.

- 1. Ensure that there is no load on the scale.
- 2. Ask the adult to stand on the scale.
- 3. Read off the measured result.
- 4. Keep the **2 in 1** key depressed until the message NET appears in the display.

The weight is saved.

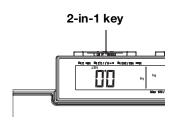
0.0 appears in the display.



Incorrect measurement as a result of changing starting weight

If weighing of the child commences with a different starting weight, it will not be possible to determine the child's weight correctly.

- Ensure that the child is always weighed with the adult with whom the starting weight was determined.
- ► Ensure that the adult's weight does not change as a result of their taking off a piece of clothing, for example.
- 5. Ask the adult to get onto the scale holding the child.



kg **5.5**

The child's weight is displayed.

The \triangle symbol and the messages "HOLD" and "NET" are displayed.

- 6. Ask the adult to get off the scale with the child.
- In order to deactivate the 2 in 1 function, press the 2 in 1 key until the ∆
 symbol and the "HOLD" and "NET" messages are no longer displayed, or
 switch off the scale.

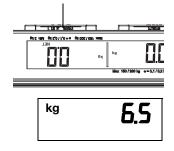
Display measuring result permanently (HOLD)

hold key

When you activate the HOLD function, the weight value continues to be displayed after the load is removed from the scale. This enables you to attend to the patient before recording the weight.

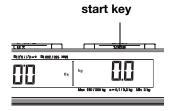
- 1. Ensure that there is no load on the scale.
- 2. Ask the patient to position him or herself on the scale.
- 3. Briefly press the hold key.

The display flashes until a stable weight is measured. The weight is then continuously displayed. The \triangle symbol (non-verifiable function) and the message "HOLD" are displayed.



4. To deactivate the HOLD function, press the **hold** key The \triangle symbol and the "HOLD" message are no longer displayed.

Switching off the scale



► Press the **start** key.

NOTE:

The scale switches off automatically after a short time if there is no load on it.

6. HYGIENE TREATMENT



WARNING!

Electric shock

The device is not de-energized when the on/off key is pressed and the display goes out. Use of fluids on the device may cause electric shock.

- ► Ensure that the device is switched off before performing any hygiene treatment.
- ► Disconnect the power supply connector before performing any hygiene treatment.
- ► Before each hygiene treatment, take the rechargeable battery out of the device (if present and removable).
- ► Ensure that no fluids penetrate the device.

NOTICE!

Damage to device

Inappropriate detergents and disinfectants may damage the sensitive surfaces of the device.

- ► Use only disinfectants free of chlorine and alcohol which are explicitly suitable for acrylic sheet and other sensitive surfaces (active ingredient: quaternary ammonium compounds, for example).
- ▶ Do not use caustic or abrasive detergents.
- ▶ Do not use organic solvents (e.g. white spirit or petroleum spirit).

6.1 Cleaning

► Use a soft cloth dampened with mild soapsuds to clean the surfaces of the device.

6.2 Disinfecting

- Check that your disinfectant is suitable for sensitive surfaces and acrylic sheet.
- 2. Follow the instructions on the disinfectant.
- 3. Disinfect the device by moistening a soft cloth in disinfectant and wiping the device over with it.

Interval	Component
Prior to every measurement with direct skin contact	Weighing platform
After every measurement with direct skin contact	Weighing platform
If required	Display

6.3 Sterilizing

This device may not be sterilised.

7. FUNCTION CHECK

▶ Perform a function check prior to each use.

A complete function check includes:

- visual inspection for mechanical damage
- checking the alignment of the device
- visual and function check of the display elements
- function check of all the controls shown in the section entitled "Overview"
- function check of optional accessories

If you notice any faults or deviations during the function check, first try to resolve the error with the aid of the section entitled "What do I do if ..." in this document.



CAUTION!

Personal injury

If you notice any faults or deviations during the function check which cannot be resolved with the aid of the section entitled "What do I do if ..." in this document, you may not use the device.

- ► Have the device repaired by seca Service or by an authorized service partner.
- ► Follow the section entitled "Servicing/verification" in this document.

8. WHAT DO I DO IF ...?

Problem	Cause/solution	
no weight is displayed when there is a load on the scale?	The scale has no power supply. - Check whether the scale is switched on - Check whether batteries are inserted	
the scale switches on, during transport for example?	The start key has been pressed. As the scale has a very low energy consumption, this will have very little effect on battery life. - Set the On/off switch to "OFF" for relatively long transport distances	
a weight value appears in the display of the scale following transport or a change of batteries, even without a load on it?	The scale has determined an incorrect zero point Start the scale again. The scale will then work normally again	
🗓 does not appear before weighing?	A load was already on the scale before it was switched on. - Remove the load from the scale - Switch the scale off and back on again	
appears before weighing instead of □□?	A load was already on the scale before it was switched on Remove the load from the scale - Switch the scale off and back on again	
one segment is illuminated either continuously or not at all?	The corresponding point has a fault Inform the maintenance service	
the display appears? Battery voltage is dropping Insert new batteries as soon as possible		
the display b위էէ appears?	The batteries have discharged Insert new batteries	
the display 5₺₽₽ appears?	Maximum load has been exceeded Remove the load from the scale	
the display $\mathcal{E}_{\mathcal{F}}$ and a number appear?	The scale has been incorrectly loaded. Re-start the scale after it has switched off automatically. The scale will then work normally again. If this is not the case, interrupt the power supply by switching the scale off briefly at the On/off switch. If this measure is also unsuccessful, inform the maintenance service.	

9. MAINTENANCE/VERIFICATION

We recommend having your device serviced prior to verification.



CAUTION!

Incorrect measurements as a result of poor servicing

- ▶ Please only have servicing and repairs performed by an authorized service partner.
- ► You can find service partners in your area at www.seca.com or by sending an e-mail to service@seca.com.

Have an authorized person perform verification according to national legal regulations.

Verification is always required if one or more verification seals are damaged.

10.TECHNICAL DATA

10.1 General technical data

General technical data	
Dimensions	
• Depth	360 mm
Width Height	321 mm 60 mm
Net weight	approx. 4.0 kg
Temperature range Operation	+10 °C to +40 °C (50 °F to 104 °F)
Storage	-10 °C to +65 °C (14 °F to 149 °F)
• Transport	-10 °C to +65 °C (14 °F to 149 °F)
Air pressure	
Operation	700 – 1060 hPa
• Storage	700 – 1060 hPa
Transport	700 – 1060 hPa
Humidity	
Operation	30 % – 80 %, no condensation
Storage	0 % – 95 %, no condensation
Transport	0 % – 95 %, no condensation
Height of digits	20 mm
Power supply	
 Power supply unit 	40.14
- Supply voltage	12 V
- Insulated device, protection class II	
(EN 60601-1) • Batteries	
- Supply voltage	9 V
Maximum current consumption	typically 50 mA
Medical device in accordance with	2. 2
Directive 93/42/EEC	Class I with measuring function
EN 60601-1:	
electrical medical device, type B	★
Type of protection	IP20
Operating mode	Continuous duty

10.2 Weighing technology data

Weighing technology data for seca 878	
Verification in accordance with Directive 2014/31/EU	Class III
Maximum load	200 kg
Minimum load	2 kg
Accuracy on initial verification • 0 to 50 kg • 50 kg to 150 kg • 150 kg to 200 kg	± 50 g ± 100 g ± 200 g
Graduations • 0 to 150 kg • 150 kg to 200 kg	100 g 200 g

11.OPTIONAL ACCESSORIES

Accessory	Article number
Carry case seca 421	421-00-00-009
Carry case seca 415	415-00-00-009
Individualized design panel	01-13-05-499-009
Power supply: • Plug-in power supply, Euro: 230 V~ / 50 Hz / 12 V= / 150 mA • Switched-mode power supply unit: 100-240 V~ / 50-60 Hz / 12 V= / 0.5 A	68-32-10-252 68-32-10-266

12. DISPOSAL

12.1 Device



Do not dispose of the device with household waste. The device must be disposed of properly as electronic waste. Comply with the national provisions applicable in your country. For further information contact our service department at:

service@seca.com

12.2 Batteries and battery packs



Spent (rechargeable) batteries should not be discarded with household waste, regardless of whether they contain harmful substances or not. As a consumer you are obliged by law to dispose of (rechargeable) batteries via the collection points set up by the municipal authorities or the retail sector. Only discard (rechargeable) batteries when fully discharged.

13. WARRANTY

We offer a two-year warranty from the date of delivery for defects attributable to faulty material or poor workmanship. This excludes all moveable parts such as (rechargeable) batteries, cables, power supply units, etc. Defects which are covered by the warranty shall be rectified free of charge for customers on production of the sales receipt. No further claims can be accepted. The costs of shipment in both directions shall be borne by the customer where the device is not located at the customer's premises. In the event of any damage during shipment warranty claims can only be asserted where the complete original packaging was used for shipment and the scales were secured inside in the same manner as in the original packaging. You should therefore keep all packaging.

The warranty shall become null and void where the device is opened by persons not expressly authorised to do so by seca.

In the event of a warranty issue, please contact your local seca office or the dealer from whom you ordered the product.

14. DECLARATION OF CONFORMITY



seca gmbh & co. kg hereby declares that the product meets the terms of the applicable European directives. The unabridged declaration of conformity can be found at: www.seca.com.

Medical Measuring Systems and Scales since 1840

seca gmbh & co. kg
Hammer Steindamm 3–25
22089 Hamburg · Germany
T +49 40 20 00 00 0
F +49 40 20 00 00 50
E info@seca.com

seca operates worldwide with headquarters in Germany and branches in:

seca france

seca united kingdom

seca north america

seca schweiz

seca zhong guo

seca nihon

seca mexico

seca austria

seca polska

seca middle east

seca brasil

seca suomi

seca américa latina

seca asia pacific

seca danmark

seca benelux

seca lietuva

and with exclusive partners in more than 110 countries.

All contact data at seca.com