

# **seca 103/452**

## **System instructions for use**

Software version 1.0 from Build 3

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# FOR ADMINISTRATORS: SETTING UP AND OPERATING THE SYSTEM

- System description
- Safety precautions
- Overview
- Setting up the seca connect 103 System
- Operating seca connect 103
- Connecting and installing the seca 452 interface module
- Operating connected seca measuring devices
- Hygienic treatment of the seca 452 interface module
- Function check
- Servicing
- Troubleshooting
- Technical data
- Compatible seca measuring devices
- Warranty
- Declarations of conformity
- Annex: Quick reference: Measurement procedure
- For service technicians: Servicing and repairing the system

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## 1. SYSTEM DESCRIPTION

- Intended use of the seca connect 103 software
- Intended use of the interface module seca 452
- Functional description
- User qualification

### 1.1 Intended use of the seca connect 103 software

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The **seca connect 103** software is mainly used in hospitals, medical practices and inpatient care facilities in accordance with national regulations.

The **seca connect 103** software is an accessory product for seca measuring devices. The product is used for automated data transmission (measurement results, patient ID, user ID) between seca measuring devices and EMR systems from third parties.

The **seca connect 103** software can be used to set up and adapt interfaces for automated data transmission.

Operation of the product is not necessary when in measuring mode.

### 1.2 Intended use of the interface module seca 452

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The interface module **seca 452** is mainly used in hospitals, medical practices and inpatient care facilities in accordance with national regulations.

The interface module **seca 452** is an accessory product for seca measuring devices. In conjunction with the **seca connect 103** software, the product is used to assign measurement results to patient data (patient ID) and to user data (user ID) as well as for automated data transmission between seca measuring devices and EMR systems from third parties.

## 1.3 Functional description

- [seca connect 103](#)
- [seca measuring devices with seca 452 interface module](#)
- [seca measuring devices with an internal interface module](#)
- [Connecting to EMR systems](#)
- [Data storage](#)
- [Compatibility](#)
- [Access rights](#)

### seca connect 103

The **seca connect 103** software is installed on a server. Using the browser-based user interface of the software, seca measuring devices can be connected with the **seca connect 103** software and can be configured and a connection to an EMR system can be set up.

### seca measuring devices with seca 452 interface module

The **seca 452** interface module is connected, by a cable, to seca measuring devices which do not have their own network interface. The **seca 452** interface module transmits the data between the seca measuring device and the **seca connect 103** software. For each seca measuring device, a separate **seca 452** interface module is required.

The data transmission between the **seca 452** interface module and **seca connect 103** takes place via WiFi or Ethernet. Scanners can be connected to the USB interface of the **seca 452** interface module.

The operating state and the measurement procedure are indicated using optical signals.

### seca measuring devices with an internal interface module

seca measuring devices with an internal interface module (for example, **seca 336 i**) can transfer data directly to the **seca connect 103** software. No **seca 452** interface module is required. Scanners can be connected directly to seca measuring devices with an internal interface module.

### Connecting to EMR systems

To connect to EMR systems, integration modules are configured and activated in the **seca connect 103** software. Modifications directly to the respective EMR system may be necessary. To ensure a reliable connection, we recommend having the connection implemented exclusively with support of the manufacturer of your EMR system.

### Data storage

No patient or device data is stored in the **seca connect 103** software. Only the login credentials for the **seca connect 103** are saved in the software database.

Device data is saved on the seca measuring device (devices with internal interface module) or on the connected **seca 452** interface module.

Patient data and measurement results are transmitted to the connected EMR system and saved there.

### Compatibility

The system is exclusively compatible with seca measuring devices (seca scales and length measuring devices) → [Compatible seca measuring devices](#). seca mbca and seca mvsa cannot be connected.

Measuring devices from third-party manufacturers cannot be connected.

Currently, only EMR systems from Cerner that have a VitalsLink interface are supported. Integration modules for connection to other EMR systems are in development and will be provided in later software versions.

## Access rights

The **seca connect 103** software does not manage user accounts. For the software installation, an administrator login can be created and secured with a password. Access to the software is exclusively possible with this administrator login.

## 1.4 User qualification

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- [seca connect 103 software](#)
- [seca 452 interface module](#)
- [Connected seca measuring devices](#)

### seca connect 103 software

The **seca connect 103** software may only be installed and administered by experienced administrators or hospital technicians.

### seca 452 interface module

The device may only be set up and incorporated in a network by experienced administrators or hospital technicians.

### Connected seca measuring devices

The local configuration of the system affects the measurement procedure and the operation of the connected measuring devices. Persons who should operate the connected measuring devices must be informed about these effects.

## 2. SAFETY PRECAUTIONS

- [Safety precautions in these instructions for use](#)
- [Basic safety precautions](#)

### 2.1 Safety precautions in these instructions for use

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#### **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 measured results may be incorrect.

#### **NOTE**

Includes additional information about use of the device.

## 2.2 Basic safety precautions

- Using the software
- Handling the device
- Preventing electric shock
- Prevent damage to device
- Handling measured results
- Handling packaging material

### Using the software

- ▶ Please take note of the information in these instructions for use.
- ▶ Keep the instructions for use and the declaration of conformity they include in a safe place. The current version of the instructions for use can be found at [www.seca.com](http://www.seca.com). The instructions for use are a component of the software and must be available at all times.



#### CAUTION!

##### Patient hazard, malfunction

- ▶ Only install the **seca connect 103** software on PCs equipped with an antivirus program. Always keep your antivirus program up to date to protect your computer system from current and future malware. The **seca connect 103** software is protected from manipulation and was checked for malware at the time the software was created.
- ▶ Use the **seca connect 103** PC software only for the specified intended use.
- ▶ 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 and televisions, for example, 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](http://www.seca.com).

### 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.



#### 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

- ▶ Additional devices which are connected to electrical medical devices must provide evidence of compliance with the relevant IEC or ISO standards (e.g. IEC 60950 for data-processing devices). Furthermore, all configurations must comply with the requirements of standards for medical systems (see IEC 60601-1-1 or Section 16 of the 3rd edition of IEC 60601-1 respectively). Anyone connecting additional devices to electrical medical devices is considered a system configurator and is therefore responsible for ensuring that the system complies with the requirements of standards for systems. Your at-

tention is drawn to the fact that local laws take precedence over the above-mentioned requirements of standards. In the event of any queries, please contact your local specialist dealer or Technical Service.

- ▶ Please have servicing and measuring technology checks performed every two years.
- ▶ 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](http://www.seca.com) or by sending an e-mail to [service@seca.com](mailto: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](http://www.seca.com).

## Preventing electric shock



**WARNING!**  
**Electric shock**

- ▶ Set up devices which can be operated with the electricity supply so that the power supply socket is within easy reach and the power supply can be disconnected quickly.
- ▶ Ensure that your local power supply matches the details on the device.
- ▶ Connect this device only to a power supply with a protective earth facility.
- ▶ Do not connect the device to a power supply network if there is any uncertainty about whether the protective earth is functioning. In this case, use the device exclusively in rechargeable battery mode.
- ▶ Do not connect the device to sockets that are switched by an on/off switch or a dimmer.
- ▶ Never touch the power supply cable 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.

## Prevent damage to device

### NOTICE!

#### Damage to device

- ▶ Ensure that no liquids enter the device. They can damage the electronics.
- ▶ Switch off the device (if option is provided) before you take the power supply connector out of the power supply socket.
- ▶ If you are not going to use the device for an extended period, disconnect the power supply connector from the power supply socket and remove the rechargeable battery (if present and removable). Only then is the device 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 the air openings of the device (if present) are not covered.
- ▶ 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 the ambient conditions outlined in "Intended use".
- ▶ Store the device only in the storage conditions outlined in "Intended use".
- ▶ 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 aggressive or abrasive cleaning agents.
- ▶ Do not use organic solvents (e.g. white spirit or petroleum spirit).

## Handling measured results



### CAUTION!

#### Patient hazard

In order to avoid misinterpretations, test results for medical use must be displayed and used in SI units (weight: kilogrammes, length: metres) only. Some devices offer the ability to display test results in other units. This is only an additional function.

- ▶ Use the results exclusively in SI units.
- ▶ The use of measurement results in non-SI units is the sole responsibility of the user.

### NOTICE!

#### Inconsistent measuring results

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

## Handling packaging material



### **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).

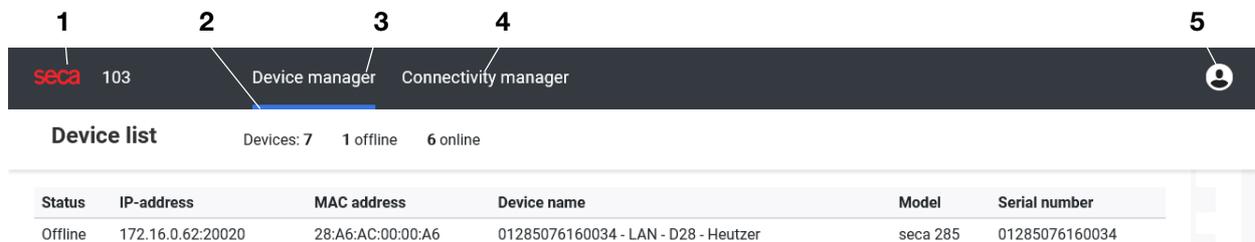
### 3. OVERVIEW

- Controls for seca connect 103
- Controls for seca 452 interface module
- Markings on the type plate (seca 452 interface module)
- Markings on the packaging (seca 452 interface module)

#### 3.1 Controls for seca connect 103

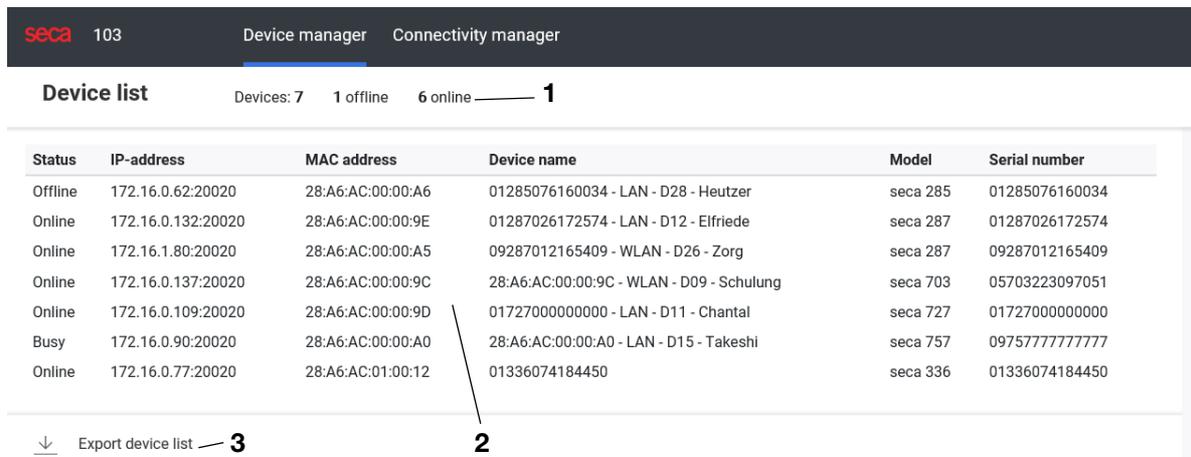
- Menu bar
- Device manager: Device list
- Device manager: Device settings
- Connectivity manager

##### Menu bar



No.	Control	Function
1	seca	Click here to display information about the <b>seca connect 103</b> software
2	Selection bar	Indicates which tab is active
3	<b>Device manager</b>	Connect and manage seca measuring devices
4	<b>Connectivity manager</b>	Establish connection to the EMR system of a third-party provider
5		<ul style="list-style-type: none"> <li>• Login/logout</li> <li>• Change password</li> </ul>

##### Device manager: Device list



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No.	Control	Function
1	Overview: connected seca measuring devices	<ul style="list-style-type: none"> <li>Total number of connected seca measuring devices</li> <li>Number of seca measuring devices offline</li> <li>Number of seca measuring devices online</li> </ul>
2	Connection data for seca measuring devices	<ul style="list-style-type: none"> <li>Status: Operating condition of the seca measuring device</li> <li>IP address: IP address and GPX listening port of the seca measuring device</li> <li>MAC address: MAC address of the seca measuring device</li> <li>Device name: Designation of the seca measuring device</li> <li>Model: seca model number</li> <li>Serial number: Serial number of seca measuring device</li> </ul>
3	Export device list	Export device list as .csv file

## Device manager: Device settings

Device settings
1 Change device settings
2 Add a device

---

3 Device name

4 Timeout "Clear patient data" [s]

5 Timeout "transmission error" [s]

6 Identification mode

7 Confirm measurement at device

8 Server address (seca connect 103)

9 Port

012870261XXXXX-WiFi-Example

60

5

ON\_WITH\_BARCODE\_PATIENT\_USER

Yes

172.16.1.63

20020

10 

WiFi ▼ 11

---

SSID SSID example

Password ••••••••|

12 

14 delete device

13 save

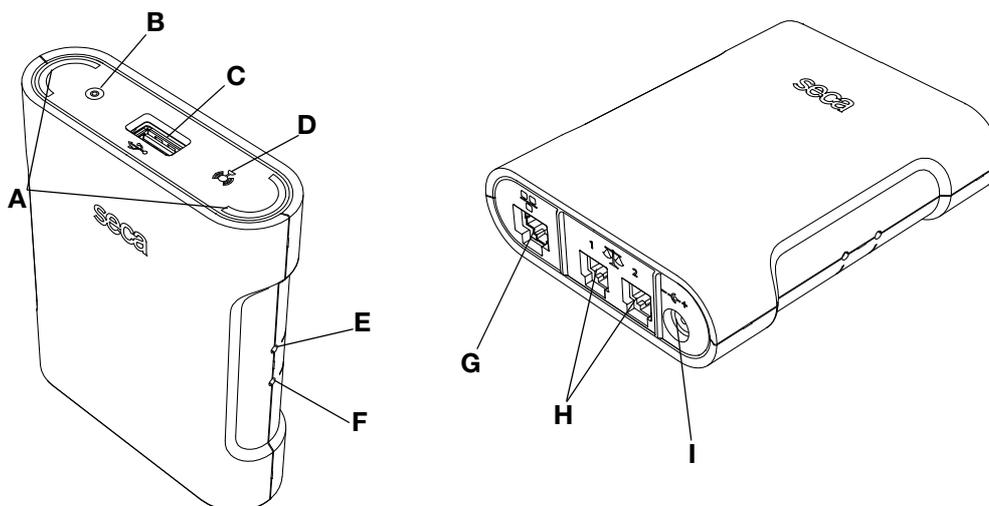
No.	Control	Function
1	<b>Change device settings</b>	Change settings for operating existing device
2	<b>Add a device</b>	Define settings for new seca measuring device
3	<b>Device name</b>	Specify the designation of the seca measuring device
4	<b>Timeout Clear patient data</b>	Specify the timeout after which temporarily saved patient data is discarded.
5	<b>Timeout Transmisson error</b>	Specify the timeout after which the <b>seca connect 103</b> assumes that there has been a communication error with the EMR system.
6	<b>Identification mode</b>	Specify patient/user identification
7	<b>Confirm measurement at device</b>	Specify whether a measurement must be confirmed on the seca measuring device
8	<b>Server address</b>	Enter the address of the server on which the <b>seca connect 103</b> software is installed
9	<b>Port</b>	Enter port (GPX Listening Port) over which a seca measuring device should communicate with the <b>seca connect 103</b> software
10	QR code for device settings	Scan QR code: Transfer settings to seca measuring device or <b>seca 452</b> interface module
11	<b>WiFi settings</b>	Enter WiFi settings for seca measuring devices
12	QR code for WiFi settings	Scan QR code: Transfer WiFi settings to seca measuring device or <b>seca 452</b> interface module
13	<b>save</b>	Save settings for the seca measuring device
14	<b>delete device</b>	Remove seca measuring device from the device list

## Connectivity manager

The screenshot shows the 'Connectivity manager' interface for 'seca 103'. The main title is 'Connectivity manager'. Below it, there is a selection field for the integration module, currently set to 'Cerner VitalsLink (Version 1.0)'. This field is labeled with '1'. Below this, there is a 'Manual affix configuration' dropdown menu, currently set to 'No', labeled with '2'. The form contains several other fields: Staff prefixes (IE), Staff postfixes, Patient prefixes (FN), Patient postfixes, Cerner VitalsLink active (Yes), API version (Legacy), Organisations-ID (791430), iBus Basis-URL (http://172.16.1.31:3000/ibus), Tenant ID, Cerner VitalsLink username (SECA), Cerner VitalsLink password, Patient context ID (FIN), Patient issuer (CERNER\_MILLENNIUM), Encounter Class, Use the device time (checkbox), Exclude keyword (---), Decimal delimiter (.), Mass (Pounds), and Length (Foot). The 'Mass' and 'Length' fields are labeled with '3' and '4' respectively. At the bottom of the form, there are two buttons: 'save' and 'activate'.

No.	Control	Function
1	Selection field: Integration module	Select integration module for the communication between the <b>seca connect 103</b> and your EMR system. Available modules: <ul style="list-style-type: none"> <li>• <b>Cerner VitalsLink</b></li> <li>• <b>seca TestModule</b> (for testing only)</li> </ul>
2	Parameter of the integration module	Set up parameter for the integration of the EMR system (support from the manufacturer of your EMR system is recommended)
3	<b>save</b>	Save settings of the integration module (integration module not active)
4	<b>activate</b>	Activate integration module (settings are not saved)

### 3.2 Controls for seca 452 interface module



No.	Symbol	Function
A		Workflow LED <ul style="list-style-type: none"> <li>• Turns green: Measurement procedure is active</li> <li>• Flashes green: Data being transmitted</li> <li>• Turns green for approx. 5 seconds: Data successfully transmitted</li> <li>• Turns red: Error in data transmission</li> </ul>
B		Power LED <ul style="list-style-type: none"> <li>• Turns green: Device is ready for use</li> <li>• Turns red: Device is defective</li> <li>• Flashes green: Device is active as access point</li> </ul>
C		USB interface (only for medical devices)
D		Network LED <ul style="list-style-type: none"> <li>• Flashes green: WiFi connection being set up</li> <li>• Turns green: WiFi connection is set up</li> <li>• Turns red: WiFi connection is defective</li> </ul>
E		WPS button: Establish WiFi connection via WPS
F		Reset button <ul style="list-style-type: none"> <li>• Press and hold (approx. 8 seconds): Reset settings</li> <li>• Press shortly (approx. 1 second): Activate/deactivate access point function</li> </ul>
G		Ethernet interface
H		Interface for seca products
I		Power supply connection

### 3.3 Markings on the type plate (seca 452 interface module)

Symbol	Meaning
<b>ProdID</b>	Product identification number, consecutive
<b>Mat. no.</b>	Variant number
<b>SN</b>	Serial number, consecutive
<b>REF</b>	Model number

Symbol	Meaning
	Follow instructions for use
	Insulated device, protection class II
	<p>Device complies with EC directives.</p> <ul style="list-style-type: none"> <li>• <b>M</b>: Conformity label in compliance with directive 2014/31/EU for non-automatic scales (verified models)</li> <li>• <b>18</b>: (Example: 2018) Year in which conformity verification was performed and the CE label was applied (verified models)</li> <li>• <b>0102</b>: Appointed office for metrology (verified models)</li> <li>• <b>0123</b>: Appointed office for medical devices</li> </ul>
	Name and address of manufacturer, date of manufacture
	Symbol of the US Federal Communications Commission (FCC)
FCC ID	Device license number from the Federal Communications Commission (FCC)
IC ID	Device license number from Industry Canada
	Do not dispose of with household waste

### 3.4 Markings on the packaging (seca 452 interface module)

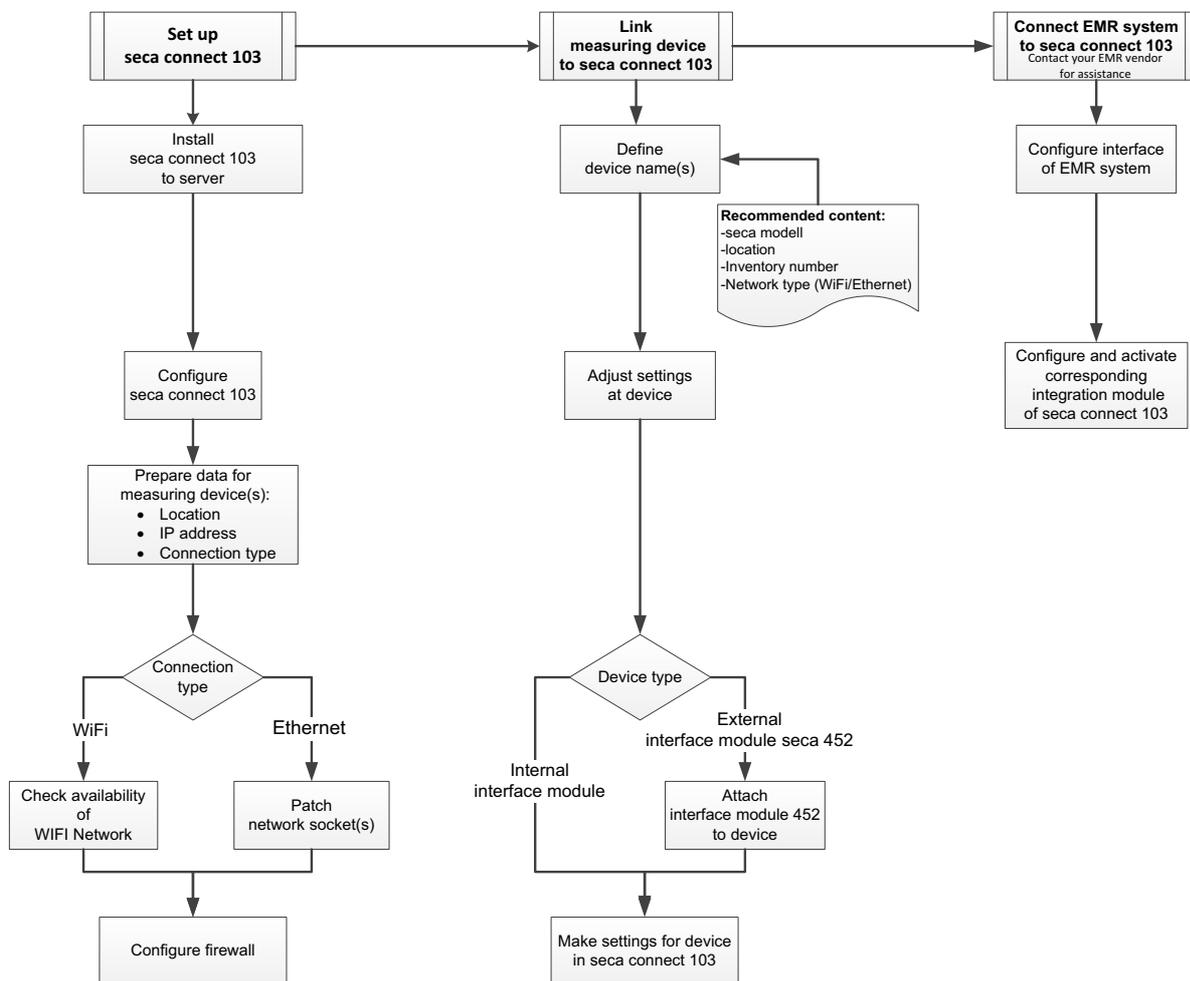
	Protect from moisture
	Arrows indicate top of product. Transport and store in an upright position.
	Fragile Do not throw or drop.
	Permitted min. and max. temperature for transport and storage
	Permitted min. and max. moisture for transport and storage
	Not sterile
	Do not reuse
	Open packaging here
	Packaging material can be disposed of through recycling programs

## 4. SETTING UP THE SECA CONNECT 103 SYSTEM

- [Work steps](#)
- [System structure](#)
- [System requirements](#)
- [Installing and configuring seca connect 103](#)

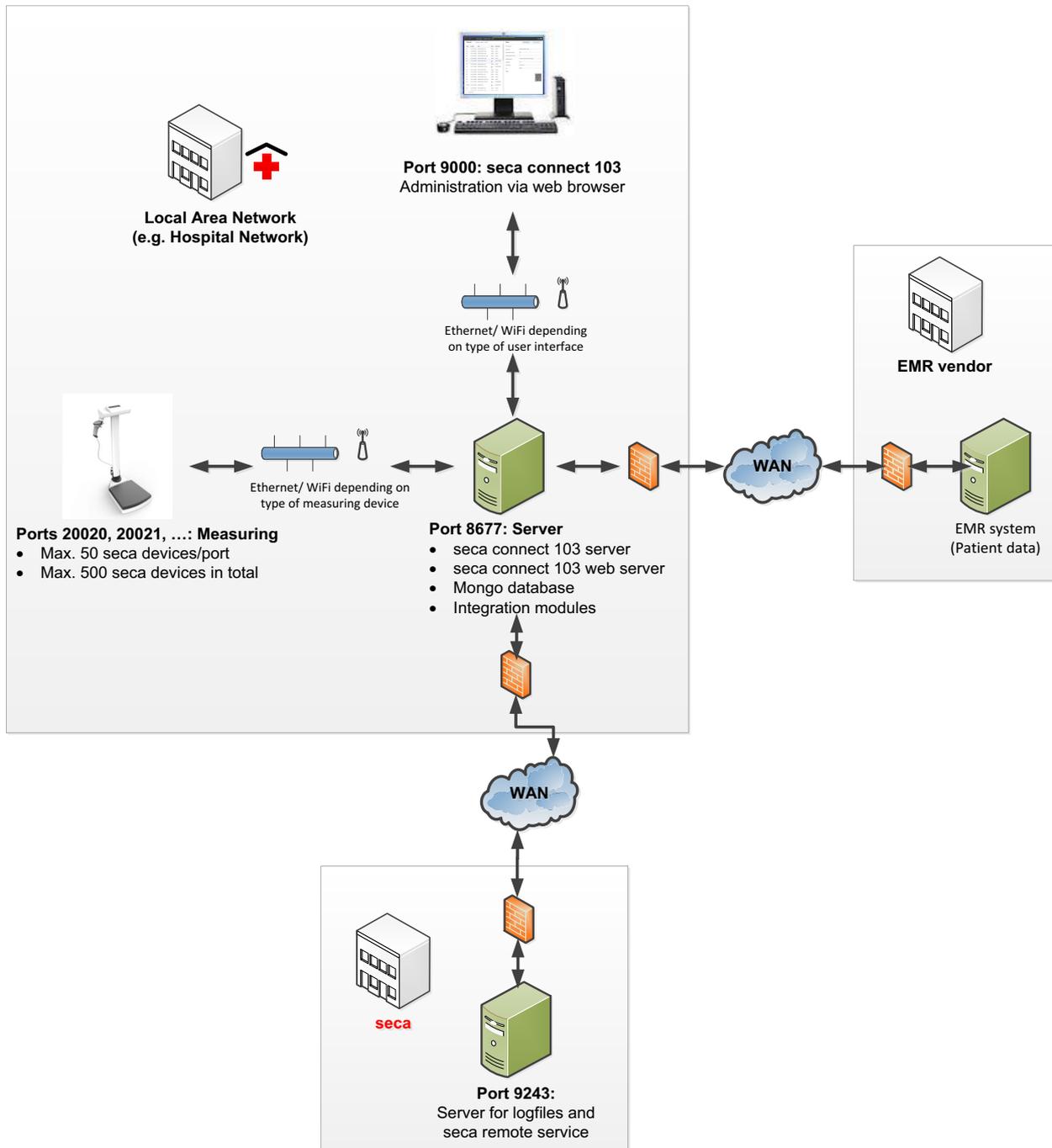
### 4.1 Work steps

This graphic provides an overview of the steps that are needed to set up an integrated measuring system with the **seca connect 103**. Details can be found on the following pages.



## 4.2 System structure

The graphic provides an overview of the system structure (here with an externally hosted EMR system).



## 4.3 System requirements

System component	Requirement
Operating system: • Client • Server	Windows® 10 Windows® Server 2016 Datacenter 64-bit (32-bit systems not supported)
Server hardware: • RAM • Processor • Free hard disk storage	at least 16 MB Intel Xeon CPU Q 2.30 GHz at least 200 GB
Browser	Google Chrome Release 64
Remote service	Team Viewer
Software	Program for displaying PDF files Program for extracting zip archives
Data transmission	Ethernet WiFi: WPA2 with PSK (WPA Enterprise not supported)
Ports	Recommended: • 8677: Windows Server, seca 103 server, seca 103 web server, mongo db • 9000: seca 103 web browser • 9243: Logstash Server for log files/remote service • 20020, 20021, 20023, ....: GPX listening ports for seca measuring devices (max. 50 devices/port, max. 10 ports)
EMR systems: supported interfaces	Cerner VitalsLink
IP addresses for seca measuring devices	Static IP addresses recommended

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## 4.4 Installing and configuring seca connect 103

- [Installing seca connect 103](#)
- [Configuring seca connect 103](#)
- [Preparing the data connection \(WiFi/Ethernet\) for seca measuring devices](#)
- [Configuring the firewall](#)
- [Configuring the security program](#)

### Installing seca connect 103

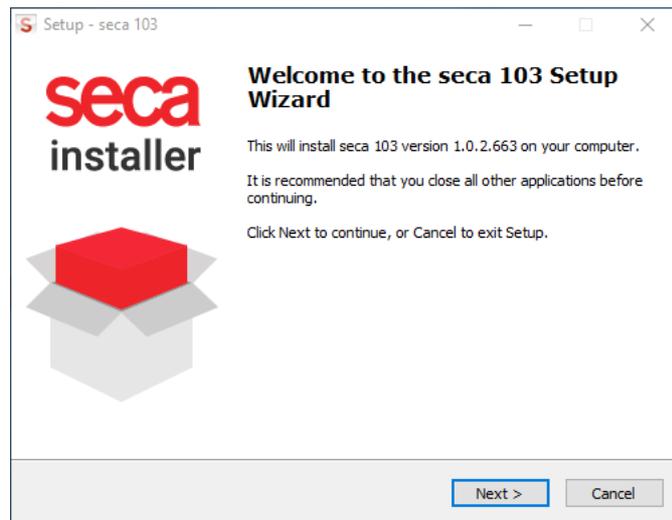
The **seca connect 103** installation package is exclusively available as a download. The corresponding link is sent as part of the project implementation.

1. Follow the link and download the installation package.
2. Provide a separate server for the **seca connect 103**.
3. Extract the zip archive on the server provided for the **seca connect 103**.  
The following programs/desktop icons are provided:

- **seca connect 103** Setup wizard
- **seca connect 103** Configurator



4. Start the setup wizard (here: `seca_103_V1_0_2_663`) by double clicking the desktop icon.

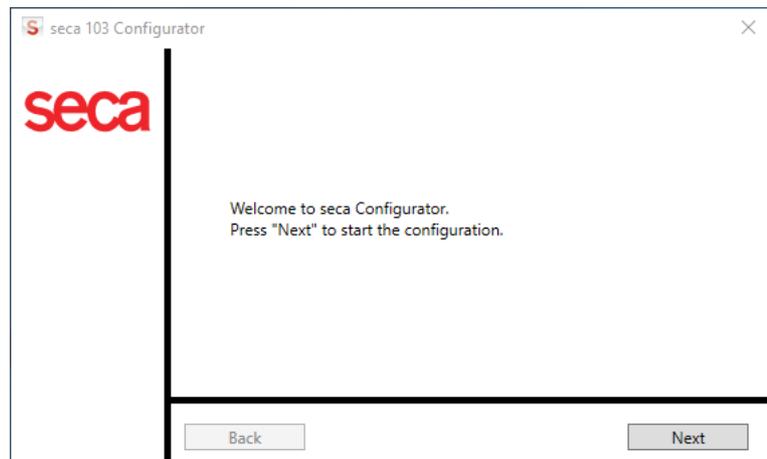


5. Follow the on-screen instructions.  
After successful installation, the **seca connect 103** Configurator starts automatically → [Configuring seca connect 103](#).

## Configuring seca connect 103

The **seca connect 103** Configurator performs the configuration for the **seca connect 103** software. Work through the individual dialog windows and then click on **Next**.

1. Double click on the icon of the **seca connect 103** Configurator.



The **seca connect 103** Configurator starts (during the initial installation, the Configurator starts automatically).

2. Set up the GPX listening ports:
  - a) Use recommended ports → [System structure](#) or modify according to the requirements of the network environment
  - b) Click “Check Ports” to test the availability of the ports

- c) Click “Create Services” to start services (seca 103.dll, seca logstash.dll, seca MongoDB.dll)
  - d) In Windows®, “Task Manager\Services”, check whether the services were started

ation.	Name	Description	Status	Startup Type	Log On As
	Remote Procedure Call (RPC)	The RPCSS ...	Running	Automatic	Network S...
	Remote Procedure Call (RP...	In Windows...		Manual	Network S...
	Remote Registry	Enables rem...		Automatic (T...	Local Service
	Resultant Set of Policy Provi...	Provides a n...		Manual	Local Syste...
	Routing and Remote Access	Offers routi...		Disabled	Local Syste...
	RPC Endpoint Mapper	Resolves RP...	Running	Automatic	Network S...
	seca 103	seca 103 Ser...	Running	Automatic	Local Syste...
	seca Logstash	seca Logsta...	Running	Automatic	Local Syste...
	seca MongoDB	seca Mong...	Running	Automatic	Local Syste...
	Secondary Logon	Enables star...	Running	Manual	Local Syste...
	Secure Socket Tunneling Pr...	Provides su...	Running	Manual	Local Service

3. Have the login credentials ready for the Logstash server.

#### NOTE

You received the login credentials for the Logstash server with the link for the **seca connect 103** installation package.

4. Log on to the Logstash server:
  - a) Enter **User name**
  - b) Enter **Password**
  - c) Click **Save**

The screenshot shows the 'seca 103 Configurator' window. On the left, there is a sidebar with the 'seca' logo and two checkboxes: 'Ports' (checked) and 'Logstash' (unchecked). The main area is titled 'Please Enter your logstash credentials:'. It contains three input fields: 'Address' (pre-filled with 'https://1535bdc9897feaca35057b24e71a257f.europe-west3.gcp.cloud.es.io'), 'Username', and 'Password'. At the bottom right is a 'Save' button. At the bottom of the window are 'Back' and 'Next' buttons.

The **seca connect 103** is connected with the Logstash server. Log files are saved there. The seca remote service is available.

You have the following options to continue:

- ▶ Enter separate login credentials for the individual services of **seca connect 103**: continue with step 5.
- ▶ Do not assign separate login credentials: In the **Logstash** tab, click **(Re)Start Services** and continue with step 6.

5. Enter separate login credentials for the individual services of **seca connect 103**:
  - a) Enter **User name**
  - b) Enter **Password**
  - c) Click **Apply**
  - d) Click **(Re)Start Services**

The screenshot shows the 'seca 103 Configurator' window. On the left, there is a sidebar with the 'seca' logo and three checkboxes: 'Ports' (checked), 'Logstash' (checked), and 'Services' (unchecked). The main area is titled 'Optionally: Enter Service Account credentials'. It contains three columns of input fields for 'seca logstash', 'seca mongoDB', and 'seca 103'. Each column has 'Username' and 'Password' fields. Below each column is an 'Apply' button. At the bottom right is a '(Re)Start Services' button. At the bottom of the window are 'Back' and 'Next' buttons.

6. Create the login credentials for the administration of the Mongo database (administrator login for the **seca connect 103**):
  - a) Assign **User name**
  - b) Enter **Password**
  - c) Repeat **Password**
  - d) Click **Generate**

With the login credentials (administrator login) you can now open **seca connect 103** in the browser ([IP address of the **seca connect 103** server]: 9000/login).

7. Click **Finish**

The configuration is complete.

8. Open **seca connect 103** in your browser:
  - a) Enter "IP address **seca connect 103** server]: 9000/login"
  - b) Log in with the administrator login created in step 6.

You have the following options:

- ▶ → [Preparing the data connection \(WiFi/Ethernet\) for seca measuring devices](#)
- ▶ → [Managing seca measuring devices](#)
- ▶ → [Managing integration modules](#)

## Preparing the data connection (WiFi/Ethernet) for seca measuring devices

seca measuring devices can transfer data via WiFi or via Ethernet to the **seca connect 103**. The type of data connection can be selected separately for each connected seca measuring device.

When preparing the data connection (WiFi/Ethernet), the following factors must be taken into account:

- seca measuring devices used → [Compatible seca measuring devices](#):
  - seca measuring devices with internal interface module (for example, **seca 336 i**): Exclusively WiFi
  - seca measuring devices with **seca 452** interface module (for example, **seca 704**): Ethernet or WiFi
- Technical and structural conditions in your institution:
  - Network structure and capability
  - Length of the data transmission paths
  - Location of the seca measuring device, possible obstacles between transmitter and receiver, for example, other medical devices, furniture
  - Properties of ceilings and walls

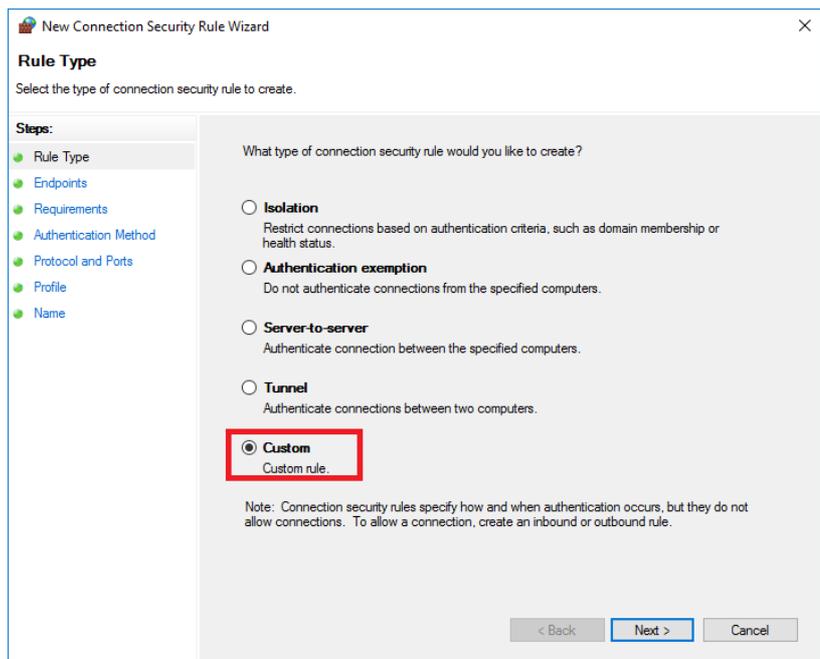
Depending on the data connection, the following preparation work is necessary:

- ▶ Assign IP addresses for seca measuring devices (static IP addresses recommended)
- ▶ WiFi: Network definition/new setup
- ▶ Ethernet: Patch network socket at location of seca measuring device

## Configuring the firewall

The settings in the Windows® Defender Firewall are described in the following text. If you use a different firewall, define the settings accordingly. Work through the individual dialog windows and then click on **Next**.

1. Open the firewall dialog window (“Windows Administrative Tools\Windows Defender Firewall with Advanced Settings”).
2. Create a new rule:
  - a) Click “Connection Security Rules”
  - b) Click “New Rule”
3. Under “Rule Type”, click “Custom”.



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4. Under “Endpoints”, select the following settings:
  - Endpoint 1: “any IP address”
  - Endpoint 2: “any IP address”

The screenshot shows the 'New Connection Security Rule Wizard' dialog box, specifically the 'Endpoints' step. The title bar reads 'New Connection Security Rule Wizard'. Below the title bar, the section is titled 'Endpoints' with the instruction: 'Specify the computers between which secured connections will be established using IPsec.' On the left, a 'Steps:' pane lists: Rule Type, Endpoints (selected), Requirements, Authentication Method, Protocol and Ports, Profile, and Name. The main area contains the text: 'Create a secured connection between computers in Endpoint 1 and Endpoint 2.' Under 'Which computers are in Endpoint 1?', the radio button for 'Any IP address' is selected and highlighted with a red box. Below it is an empty text box for 'These IP addresses:' with 'Add...', 'Edit...', and 'Remove' buttons. A 'Customize...' button is also present. The same structure is repeated for 'Which computers are in Endpoint 2?', with 'Any IP address' selected and highlighted. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.

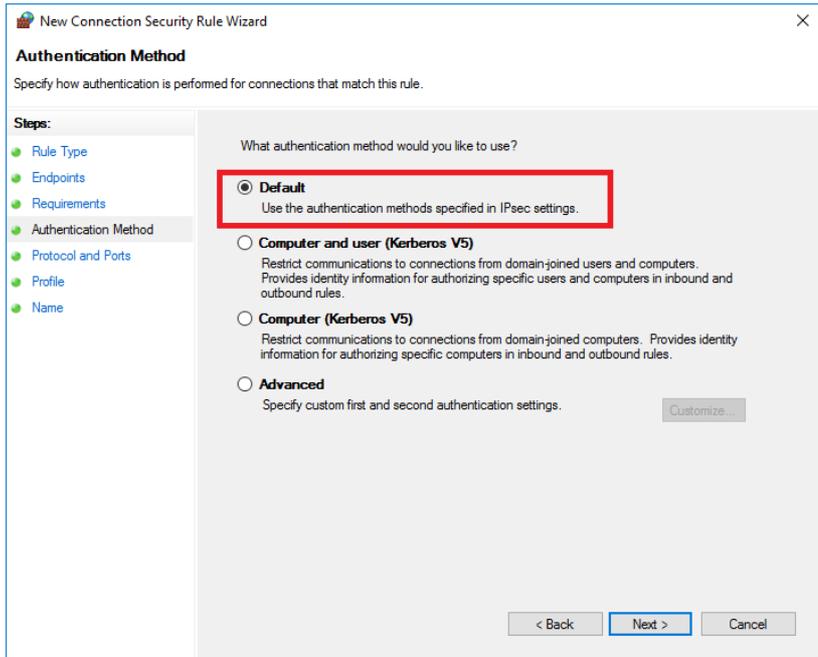
5. Under “Requirements” select the setting “Request authentication for inbound and outbound connections”.

The screenshot shows the 'New Connection Security Rule Wizard' dialog box, specifically the 'Requirements' step. The title bar reads 'New Connection Security Rule Wizard'. Below the title bar, the section is titled 'Requirements' with the instruction: 'Specify the authentication requirements for connections that match this rule.' On the left, a 'Steps:' pane lists: Rule Type, Endpoints, Requirements (selected), Authentication Method, Protocol and Ports, Profile, and Name. The main area contains the text: 'When do you want authentication to occur?'. Four radio button options are listed:
 

- Request authentication for inbound and outbound connections**  
Authenticate whenever possible but authentication is not required.
- Require authentication for inbound connections and request authentication for outbound connections**  
Inbound connections must be authenticated to be allowed. Outbound connections are authenticated whenever possible but authentication is not required.
- Require authentication for inbound and outbound connections**  
Both inbound and outbound connections must be authenticated to be allowed.
- Do not authenticate**  
No connections will be authenticated.

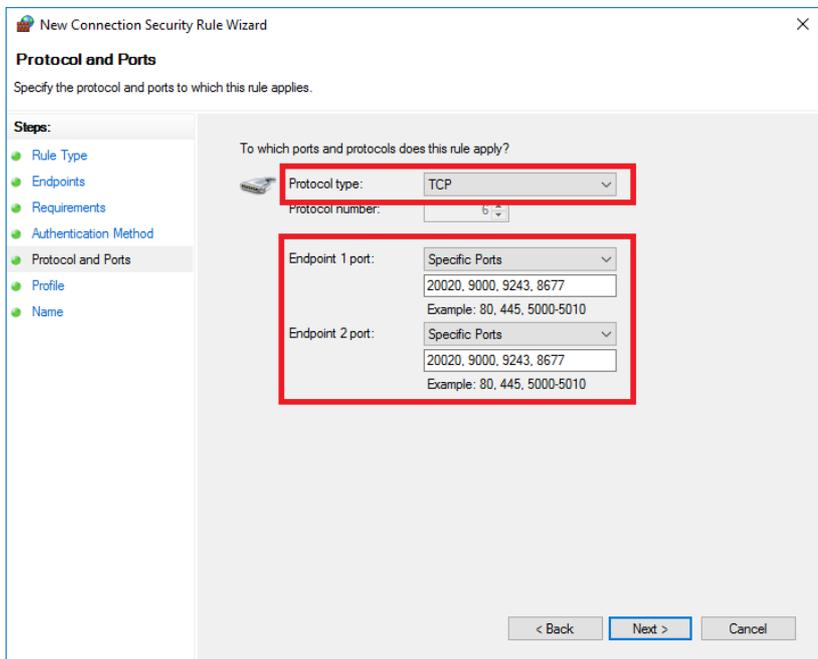
 The first option is selected and highlighted with a red box. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.

6. Under “Authentication Method”, select the setting “Default”.



7. Under “Protocols and Ports”, enter the following:

- Protocol type: “TCP”
- Endpoint port: “Specific Port”
- Enter all ports that are needed for the data connection of the **seca connect 103** → [System requirements](#)
- Ensure that the settings for endpoint 1 and 2 are identical



8. Under “Where does this rule apply?”, select the settings according to your network requirements (here: all options selected).

New Connection Security Rule Wizard

**Profile**

Specify the profiles for which this rule applies.

**Steps:**

- Rule Type
- Endpoints
- Requirements
- Authentication Method
- Protocol and Ports
- Profile**
- Name

When does this rule apply?

- Domain**  
Applies when a computer is connected to its corporate domain.
- Private**  
Applies when a computer is connected to a private network location, such as a home or work place.
- Public**  
Applies when a computer is connected to a public network location.

< Back   Next >   Cancel

9. Under “Name”, enter a name for the new rule according to the guidelines of your institution (here: “seca 103 Security Rules”).

New Connection Security Rule Wizard

**Name**

Specify the name and description of this rule.

**Steps:**

- Rule Type
- Requirements
- Authentication Method
- Profile
- Name**

Name:  
seca 103 Security Rules

Description (optional):

< Back   Finish   Cancel

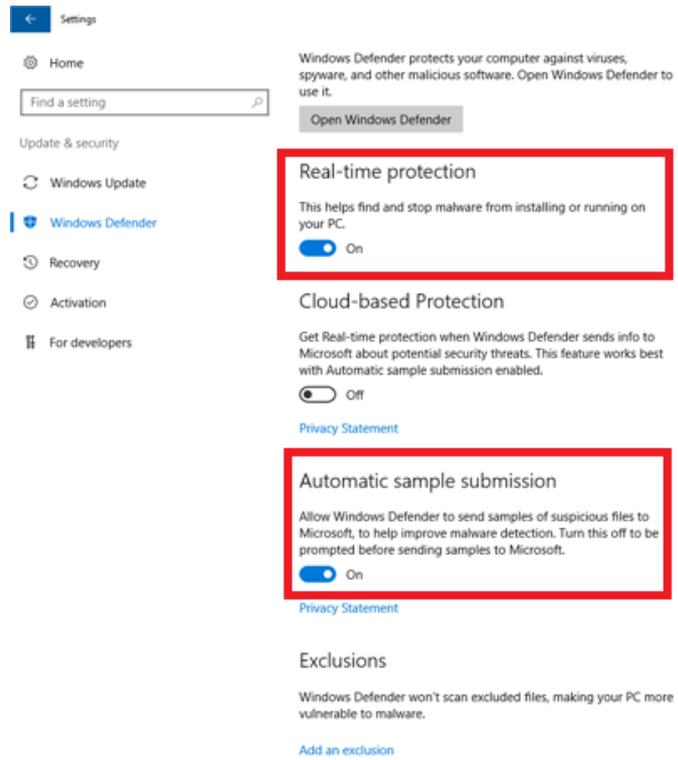
**NOTE**

If your system is secured by multiple firewalls, define appropriate settings in **all** firewalls.

## Configuring the security program

The following procedure describes the settings in Windows® Defender. If you use a different security program, define the settings accordingly. Work through the individual dialog windows and then click on **Next**.

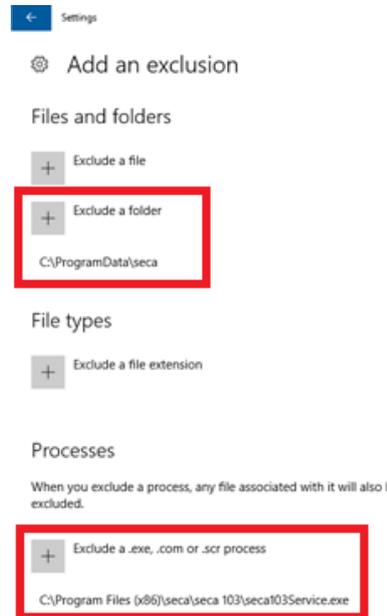
1. Open the Windows® Defender (Settings\Update & Security\Windows® Defender).
2. Ensure that the following settings are in place:
  - Realtime protection: on
  - Cloud-based protection: off
  - Automatic sample submission: on



3. Under "Exclusions", click "Add an exclusion".

4. Enter the following exclusions:

- Exclude a folder: C:\ProgramData\seca
- Exclude a .exe, .com or .scr process:  
C:\Program Files (x86)\seca\seca103\seca103Service.exe



**NOTE**

If your system is secured by additional security programs, define appropriate settings in **all** the security programs.

## 5. OPERATING SECA CONNECT 103

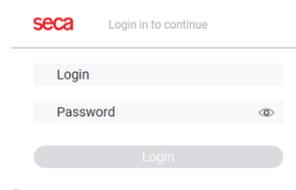
- [Primary functions](#)
- [Managing seca measuring devices](#)
- [Managing integration modules](#)

### 5.1 Primary functions

- [Logging in](#)
- [Changing a password](#)
- [Querying the version](#)
- [Logging out](#)

#### Logging in

1. Open the **seca connect 103** software in your browser [IP address **seca connect 103** server]: 9000/login.
2. In the **Login** dialog window, enter the login credentials you created in → [Configuring seca connect 103](#).



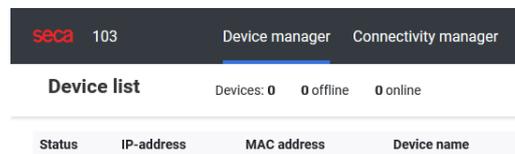
3. Click **Login**.  
The **seca connect 103** software is opened.

#### Changing a password

1. Click on the  symbol.
2. Click **Change password**.
3. Enter the old password.
4. Enter the new password.
5. Confirm the new password.
6. Click **Change password**.  
The new password is active.

#### Querying the version

1. In the menu bar, click **seca**.



Information on the software version is displayed.

2. Click on another entry in the menu bar to exit this view.

#### Logging out

1. Click on the  symbol.
2. Click **Logout**.
3. Close the browser.

## 5.2 Managing seca measuring devices

- [Preparing a seca measuring device](#)
- [Adding a seca measuring device](#)
- [Changing a setting of a seca measuring device](#)
- [Exporting the device list](#)
- [Deleting a device](#)

### Preparing a seca measuring device

Presets need to be defined on the seca measuring device to ensure reliable system function.

#### NOTICE!

##### Malfunction and incorrect data allocation

Incorrect or incomplete settings on seca measuring devices can lead to the transmission of invalid measured values, incorrect allocation of measured values, or malfunctions in the system or in individual measuring devices.

- ▶ Ensure that all seca measuring devices to be connected are correctly configured.
- ▶ Follow the instructions for use for the respective seca measuring device.

1. Make the following settings on the seca measuring device:

Function	Setting	Device type
<b>Autohold</b>	On	All
<b>seca 360° wireless<sup>a</sup></b>	Off	<b>seca 360° wireless measuring devices</b>

a. For the **seca 285/seca 284** measuring stations, this function must remain activated to be able to transmit length measured values from the head slide to the multi-functional display.

2. Ensure that the seca measuring device is **not** connected to the following devices:
  - Stadiometer: **seca 274, seca 264**
  - Wireless printer: **seca 465, seca 466, seca 467**
  - Wireless printer from third parties
3. Continue based on the type of seca measuring device (→ [Compatible seca measuring devices](#)):
  - ▶ Devices with an internal interface module, for example: **seca 336 i**: continue with section → [Adding a seca measuring device](#)
  - ▶ Device requires **seca 452** interface module: continue with section → [Connecting and installing the seca 452 interface module](#)

## Adding a seca measuring device

The **Add a device** dialog window is automatically active when you open the software in the browser. Configure the parameters described in the following text according to the conditions and requirements of your network and your institution. QR codes are generated once entries have been made in the dialog field.

**Device settings** ▾

Change device settings
Add a device

---

Device name	012870261XXXXX-WiFi-Example
Timeout "Clear patient data" [s]	60
Timeout "transmission error" [s]	5
Identification mode	ON_WITH_BARCODE_PATIENT_USER ▾
Confirm measurement at device	Yes ▾
Server address (seca connect 103)	172.16.1.63
Port	20020



1. Enter the following data for the seca measuring device:

Parameter	Description	Values
<b>Device name</b>	Designation of the seca measuring device	Recommended designation elements: <ul style="list-style-type: none"> <li>• seca model number</li> <li>• Setup location</li> <li>• Inventory number</li> <li>• Connection type: WiFi/Ethernet</li> </ul>
<b>Timeout Clear patient data</b>	After expiration of the timeout, temporarily stored patient data is discarded.	<ul style="list-style-type: none"> <li>• Min: 5 s</li> <li>• Max: 3600 s</li> </ul>
<b>Timeout Transmisson error</b>	After expiration of the timeout, the <b>seca connect 103</b> assumes that a transmission error has occurred.	<ul style="list-style-type: none"> <li>• Min: 5 s</li> <li>• Max: 60 s</li> </ul> <p>The <b>seca connect 103</b> attempts to reach the EMR system twice. Error messages are issued after twice the amount of time set here.</p>
<b>Identification mode</b>	Specify patient/user identification	<ul style="list-style-type: none"> <li>• <b>On_with_Barcodes_Patient_User</b> (recommended): Scan patient ID and user ID</li> <li>• <b>On_with_Barcodes_Patient</b>: only scan patient ID</li> <li>• <b>On_without_Barcodes</b>: for future system upgrades, currently no function</li> </ul>
<b>Confirm measurement at device</b>	Specify whether a measurement must be confirmed on the seca measuring device	<ul style="list-style-type: none"> <li>• <b>yes</b> (recommended): Measurement must be confirmed using the "Confirm" button (may differ by device) or with the scanner</li> <li>• <b>no</b>: Measurement is automatically sent to the EMR system once a stable weight value (autohold) is present</li> </ul>
<b>Server address</b>	Address of the <b>seca connect 103</b> server	Enter the IP address of the server on which the <b>seca connect 103</b> is installed.
<b>Port</b>	GPX listening port over which a seca measuring device should communicate with the <b>seca connect 103</b>	Enter a GPX listening port that was enabled in the <b>seca connect 103</b> Configurator → <a href="#">Configuring seca connect 103</a>

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- Scan the QR code with the scanner that is connected to the seca measuring device or to the respective **seca 452** interface module. The settings are transferred to the seca measuring device or the respective **seca 452** interface module. The transmission is completed once the firmware version of the added seca measuring device is shown under **Device settings**.

#### Device settings ▾

Firmware version 08-06-15-337\_(Build 157) May 14 2018

Device name 01287026172574 - LAN - D12 - Elfriede

You have the following options to continue:

- ▶ To add an additional seca measuring device, go back to step 1.
- ▶ To define **WiFi** settings, continue with step 3.

#### WiFi ▾

SSID SSID example

Password ●●●●●●●|



- Enter the parameters of the WiFi network under **WiFi**:
  - SSID
  - Password
 The QR code for the **WiFi** settings is generated automatically.
- Scan the **WiFi** QR code with the scanner that is connected to the seca measuring device or to the respective **seca 452** interface module. The settings are transferred to the seca measuring device or the respective **seca 452** interface module. Connecting the seca measuring device is complete.
- Repeat the procedure for all seca measuring devices that you want to connect with the **seca connect 103**.

## Changing a setting of a seca measuring device

The **Change device settings** dialog window is automatically active when you click a seca measuring device in the **Device list**. Settings for seca measuring devices that are **Offline cannot** be changed.

1. In the **Device list**, click on the seca measuring device whose setting you would like to change.

### Device list

Devices: 7 1 offline 6 online

Status	IP-address	MAC address	Device name	Model	Serial number
Offline	172.16.0.62:20020	28:A6:AC:00:00:A6	01285076160034 - LAN - D28 - Heutzer	seca 285	01285076160034
Online	172.16.0.132:20020	28:A6:AC:00:00:9E	01287026172574 - LAN - D12 - Elfriede	seca 287	01287026172574
Online	172.16.1.80:20020	28:A6:AC:00:00:A5	09287012165409 - WLAN - D26 - Zorg	seca 287	09287012165409
Online	172.16.0.137:20020	28:A6:AC:00:00:9C	28:A6:AC:00:00:9C - WLAN - D09 - Schulung	seca 703	05703223097051
Online	172.16.0.109:20020	28:A6:AC:00:00:9D	01727000000000 - LAN - D11 - Chantal	seca 727	01727000000000
Busy	172.16.0.90:20020	28:A6:AC:00:00:A0	28:A6:AC:00:00:A0 - LAN - D15 - Takeshi	seca 757	09757777777777
Online	172.16.0.77:20020	28:A6:AC:01:00:12	01336074184450	seca 336	01336074184450

The settings of the seca measuring device are shown under **Device settings**.

**Device settings** ▾

Change device settings
Add a device

---

Firmware version	08-06-15-337_(Build 157) May 14 2018
Device name	01287026172574 - LAN - D12 - Elfriede
Timeout "Clear patient data" [s]	60
Timeout "transmission error" [s]	5
Identification mode	ON_WITH_BARCODE_PATIENT ▾
Confirm measurement at device	Yes ▾
Server address (seca connect 103)	172.16.1.63
Port	20020



2. Change the settings for the seca measuring device (compare to the section → [Adding a seca measuring device](#)). The QR code is automatically generated.
3. Scan the QR code with the scanner that is connected to the seca measuring device or to the respective **seca 452** interface module. The settings are transferred to the seca measuring device or the respective **seca 452** interface module.
4. Repeat the procedure for all seca measuring devices whose settings you want to change.

## Exporting the device list

You can export the device list, for example for documentation purposes, as a .csv file.

1. Click **Export device list**.

↓ Export device list

The device list is exported.

2. Save the device list, for example for documentation purposes.

### NOTE

Importing device lists is **not** possible.

## Deleting a device

You can clean up the **Device list** by deleting seca measuring devices from the list that have the status **Offline**.

seca measuring devices are displayed under the following conditions as **Offline**:

- Switched off/no power supply
- WiFi connection disconnected
- Ethernet cable was removed
- Device error

Connection data is saved on the seca measuring device or on the respective **seca 452** interface module. For this reason, the seca measuring device automatically appears in the **Device list** once it is **Online**.

To delete **Offline** devices from the **Device list**, proceed as follows:

1. Save the current device list as a .csv file → [Exporting the device list](#).
2. Click in the **Device list** on the **Offline** device.
3. Click **delete device**.  
The seca measuring device is deleted from the **Device list**.
4. Get the **Offline** device ready for operation → [Troubleshooting](#).  
The seca measuring device appears in the **Device list** once it is back **Online**.

## 5.3 Managing integration modules

### NOTICE!

#### Malfunction and incorrect data allocation

Incorrect or incomplete settings in the respective EMR system or in the integration modules can lead to malfunction in the overall system or to incorrect allocation of measurement results.

- ▶ Only make settings for your EMR system in consultation with the manufacturer of your EMR system.
1. If necessary, make the settings directly on your EMR system.
  2. In the menu bar of the **seca connect 103**, click **Connectivity manager**.

- In the **Connectivity manager** tab, click on the drop-down menu.  
The following integration modules are displayed:

Integrations module	Use
<b>Cerner VitalsLink</b>	Connection to Cerner EMR systems with VitalsLink interface
<b>seca TestModule</b>	For test purposes during system set up
<b>BasicModule</b>	For future system upgrades, currently no function
<b>XMLModule</b>	For future system upgrades, currently no function

- Click on the appropriate integration module.  
The parameter list for the module is displayed (here: Cerner VitalsLink).

## Connectivity manager

Cerner VitalsLink		(Version 1.0) ▾
Manual affix configuration	No	▾
Staff prefixes	IE	
Staff postfixes		
Patient prefixes	FN	
Patient postfixes		
Cerner VitalsLink active	Yes	▾
API version	Legacy	▾
Organisations-ID	791430	
iBus Basis-URL	http://172.16.1.31:3000/ibus	
Tenant ID		

- Define the settings for the parameters of the integration module  
→ [Integration module Cerner VitalsLink: Parameter](#).
- Scroll down in the dialog window.  
The **save** and **activate** buttons are visible.
- Click **save**.  
The settings will be saved.
- To use the integration module, click **activate**.  
The previously used integration module is deactivated automatically.

### NOTE

- For all available integration modules, you can save presets, but you can only activate one integration module each.
  - If you activate an integration module without saving, the settings are discarded as soon as you activate a different integration module.
- Restart the service “seca 103.dll” seca(in Windows® under “Task Manager\Services”).  
The system is ready for operation.

## 6. CONNECTING AND INSTALLING THE SECA 452 INTERFACE MODULE

- [Selecting a location](#)
- [Retrofitting baby scales 757/727](#)
- [Retrofitting multi-functional scales 635/634, 657/656, 675/674 \(models with cabled remote display\)](#)
- [Retrofitting multi-functional scales 645/644, 665/664, 667, 677/676, 685/684 \(models with mounted display\)](#)
- [Mounting the seca 452 interface module to the wall](#)
- [Retrofitting column scale 704](#)
- [Retrofitting measuring stations 285/284, 287/286](#)
- [Performing final work](#)

### NOTE

For seca measuring devices with an internal interface module (for example, **seca 336 i**), no **seca 452** interface module is needed.

### NOTE

The **seca 452** interface module is available in two versions (set no. 4520050009 for seca scales and set no. 4520000009 for seca measuring stations). The complete scope of delivery can be found in the device description, which is included with the sets.

### 6.1 Selecting a location

The **seca 452** interface module can be mounted on the wall or placed next to the scale. For column scales and measuring stations, the **seca 452** interface module is installed directly on the measuring device.

- ▶ Take the following into account when you select the location for the **seca 452** interface module:
  - For wall installation: At the installation point, there must be no lines in the wall that could be drilled into.
  - Fluids cannot penetrate into the connections.
  - Cables are not kinked and not subject to mechanical stress.
  - Cables are sufficiently long to be able to move or tilt the measuring device (for example, for cleaning).
  - The scanner cable is long enough to be able to operate the scanner.
  - LEDs can be read easily.

### NOTICE!

#### Damage to device due to incorrect device set up

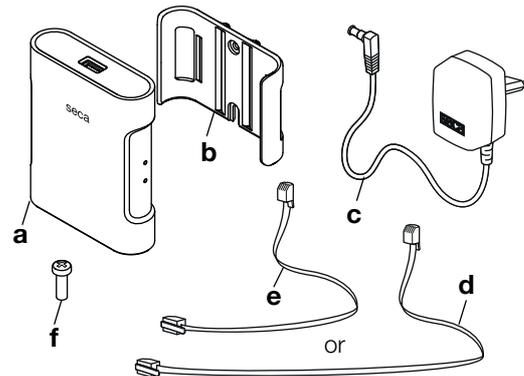
If the original device location changes due to retrofitting, the device must be correctly set up at the new location.

- ▶ Follow the information in the section "Setting up the device" in the corresponding instructions for use.

## 6.2 Retrofitting baby scales 757/727

- Preparing the scale
- Connecting a seca 452 interface module
- Mounting the seca 452 interface module to the wall
- Performing final work

You need the following parts from set no. 4520050009:

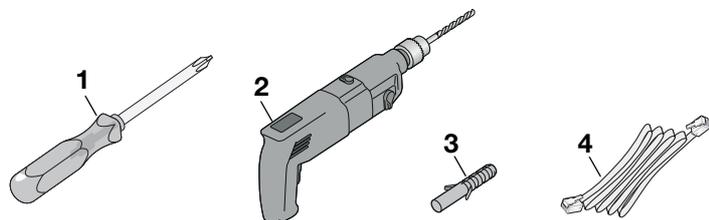


Pos.	Component	Pcs.
a	seca 452 interface module	1
b	Bracket	1
c	Power supply unit	1
d	Connecting cable, long	1
e	Connecting cable, short	1
f	Cross-head screw	2

### NOTE

- Select the long connecting cable if you want to mount the **seca 452** interface module to the wall or position it next to the scale at a significant distance. Select the short connecting cable if you want to place the **seca 452** interface module directly next to the scale.
- The scanner brackets from the **seca 452** sets are not intended for wall installation. Use a suitable scanner bracket from the scanner manufacturer. Follow the instructions in the respective installation instructions.

Depending on the installation and connection version, you may need the following tools (not included in the scope of delivery):

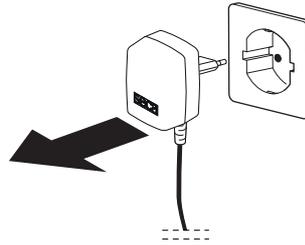


Pos.	Component	Size	Pcs.
1	Cross-head screwdriver	PH 2	1
2	Drill	Ø 5 mm	1
3	Wall plug	Ø 5 mm	2
4	Ethernet cable	n/a	1

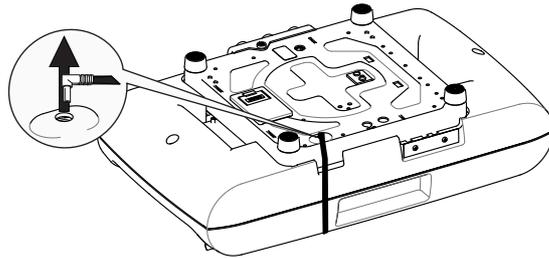
17-10-01-266-002a/07-2018B

## Preparing the scale

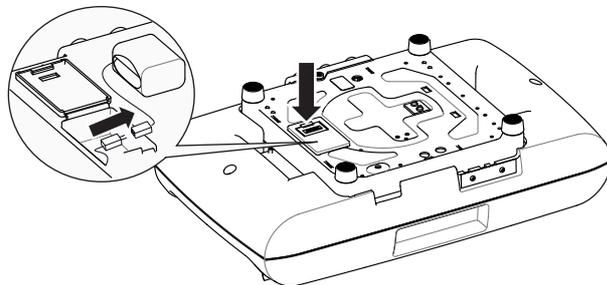
1. Switch off the scale.
2. Disconnect the power supply unit from the power supply socket.



3. Carefully turn the scale over.
4. Pull the power cable out of the scale.



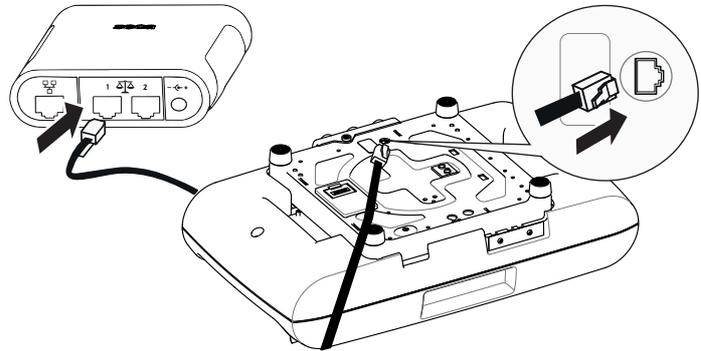
5. Remove the battery block:
  - a) Press the lid of the battery compartment in the direction of the word "Battery" printed on the compartment
  - b) Open the lid
  - c) Disconnect the battery block from the connector cable
  - d) Remove the battery block and close the lid again



6. Store the power supply unit and the battery block or dispose of them properly (→ [Disposal](#)).

## Connecting a seca 452 interface module

1. Connect the scale to the **seca 452** interface module:
  - a) Connect the connecting cable to interface 1 of the **seca 452** interface module
  - b) Connect the connecting cable to the interface of the scale

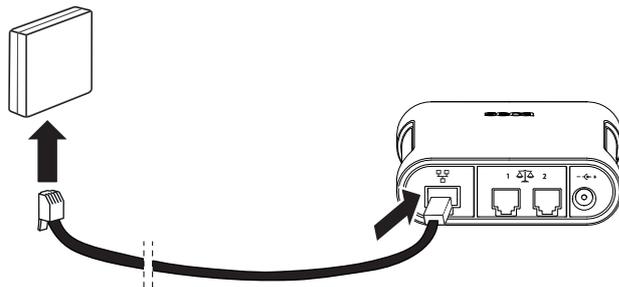


c) Turn the scale over

You have the following options to continue:

- ▶ For communication via Ethernet, continue with step 2.
- ▶ For communication over WiFi, continue with step 3.

2. Connect an Ethernet cable to the **seca 452** interface module:
  - a) Connect the Ethernet cable to the Ethernet interface of the **seca 452** interface module
  - b) Connect the Ethernet cable to the network socket



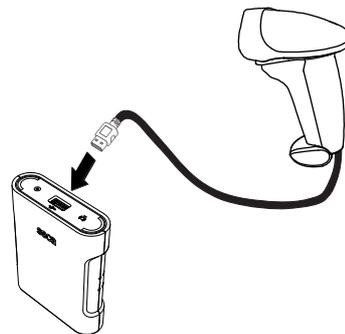
### NOTICE!

#### Malfunction caused by an incompatible scanner

Incompatible scanners can lead to faulty data transmission or system malfunction.

- ▶ Only use scanners that are listed in the section → [Optional accessories and spare parts](#).

3. Connect a scanner to the **seca 452** interface module:
  - a) Connect the scanner cable to the USB interface of the **seca 452** interface module
  - b) Attach the scanner to the scanner bracket (if present)

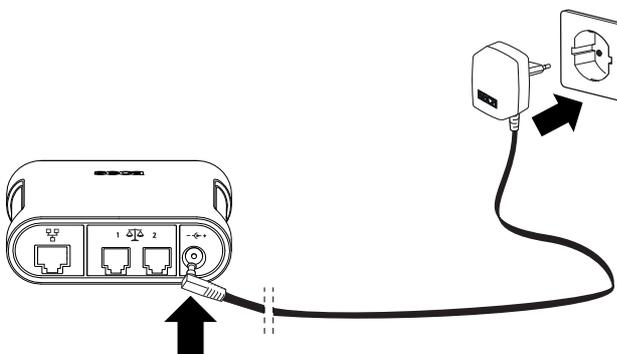


**NOTICE!****Damage to device due to incorrect power supply unit**

The power supply unit of the scale is not suitable for operation with the **seca 452** interface module.

- ▶ Only use the seca power supply unit included in set 4520050009.

4. Connect the power supply unit to the **seca 452** interface module:
  - a) Connect the power cable to the power supply connection of the **seca 452** interface module
  - b) Insert the power supply unit into a power supply socket



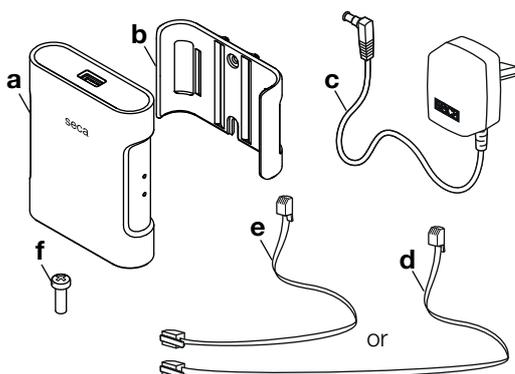
You have the following options to continue:

- ▶ **seca 452** interface module positioned next to the scale: continue with → [Performing final work](#)
- ▶ Mounting the **seca 452** interface module to the wall: continue with → [Mounting the seca 452 interface module to the wall](#)

### 6.3 Retrofitting multi-functional scales 635/634, 657/656, 675/674 (models with cabled remote display)

- [Preparing the scale](#)
- [Connecting a seca 452 interface module](#)
- [Mounting the seca 452 interface module to the wall](#)
- [Performing final work](#)

You need the following parts from set no. 4520050009:



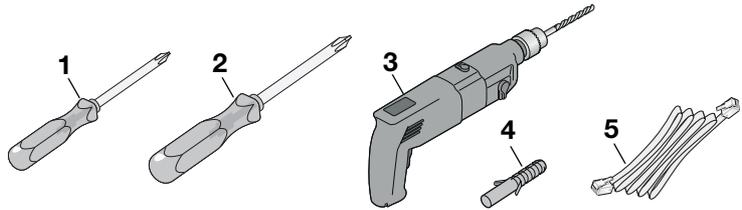
Pos.	Component	Pcs.
a	seca 452 interface module	1
b	Bracket	1
c	Power supply unit	1
d	Connecting cable, long	1
e	Connecting cable, short	1

Pos.	Component	Pcs.
f	Cross-head screw	2

**NOTE**

- The **seca 452** interface module is connected between the cabled remote display and the scale. Select the short or long connecting cable, depending on the distance of the cabled remote display to the scale.
- The scanner brackets from the **seca 452** sets are not intended for wall installation. Use a suitable scanner bracket from the scanner manufacturer. Follow the instructions in the respective installation instructions.

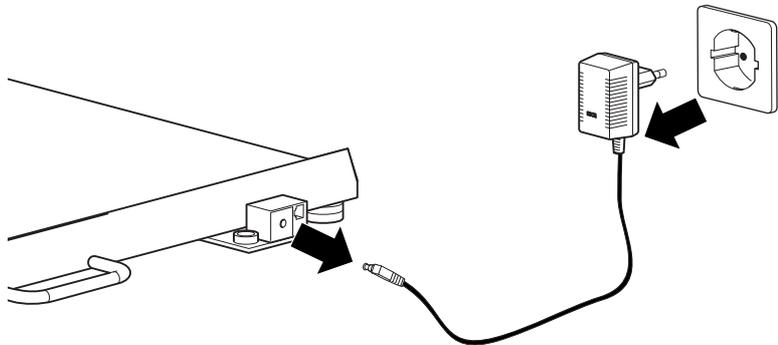
Depending on the installation and connection version, you may need the following tools (not included in the scope of delivery):



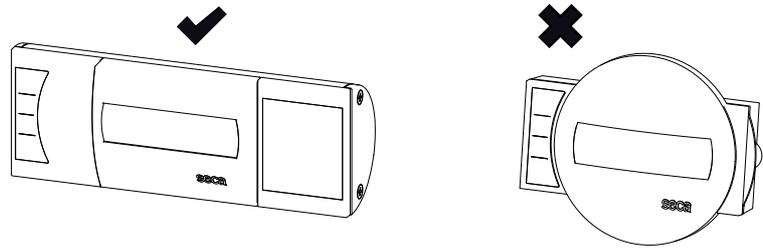
Pos.	Component	Size	Pcs.
1	Cross-head screwdriver	PH 1	1
2	Cross-head screwdriver	PH 2	1
3	Drill	Ø 5 mm	1
4	Wall plug	Ø 5 mm	2
5	Ethernet cable	n/a	1

**Preparing the scale**

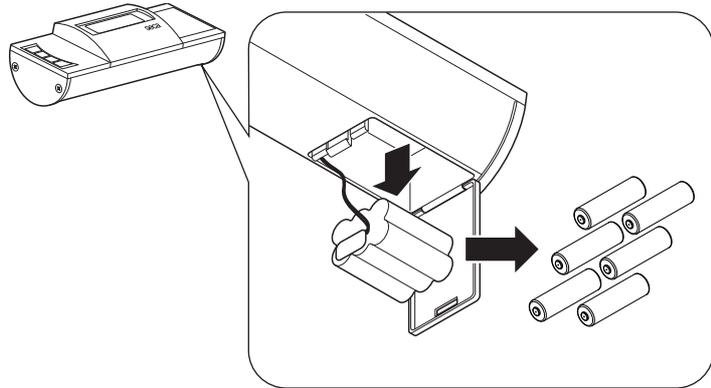
1. Switch off the scale.
2. Disconnect the power supply unit from the power supply socket.
3. Pull the power cable out of the scale.



4. Only for models **seca 635** and **seca 634** (indicated in the following figure by a checkmark): Remove the batteries from the display.



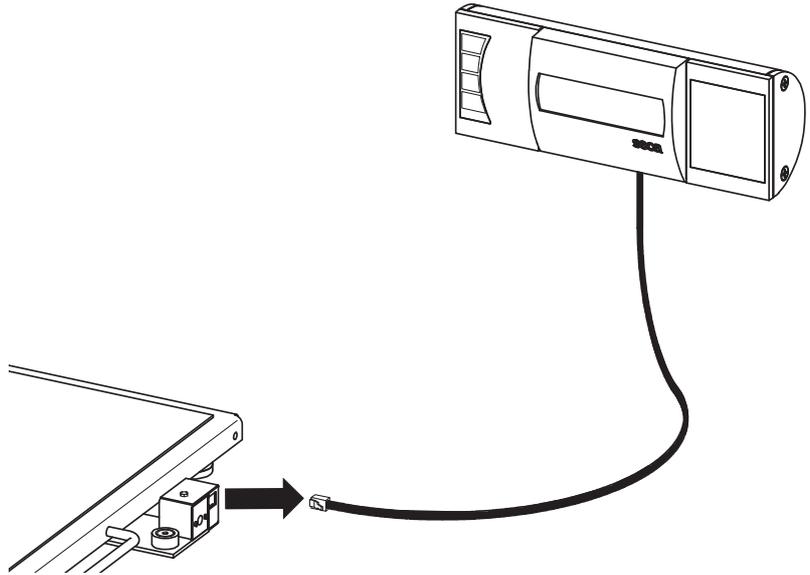
- Press the latch of the battery compartment
- Open the lid of the battery compartment
- Remove batteries from the battery holder
- Put battery holder back and close lid again



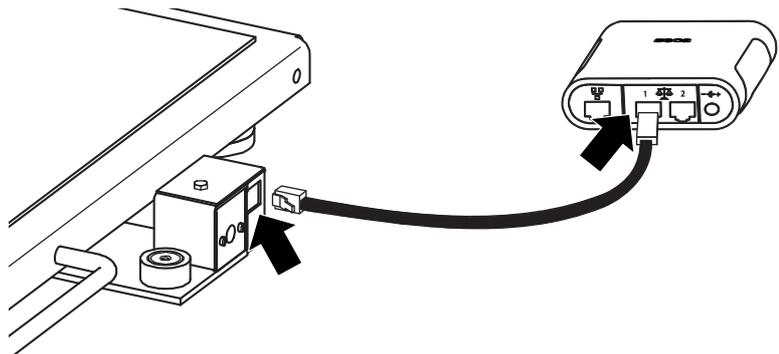
5. Store the power supply unit and the batteries or dispose of them properly (→ [Disposal](#)).

## Connecting a seca 452 interface module

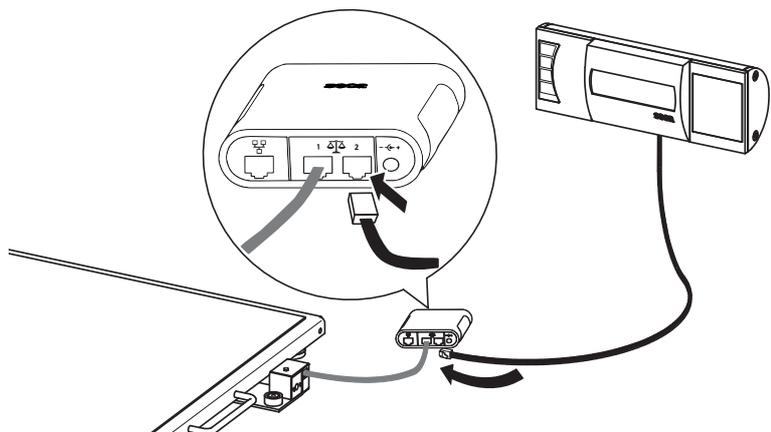
1. Connect the scale to the **seca 452** interface module:
  - a) Remove cable of cabled remote display from the scale



- b) Connect the connecting cable to the connection of the electronics box
- c) Connect the connecting cable to interface 1 of the **seca 452** interface module



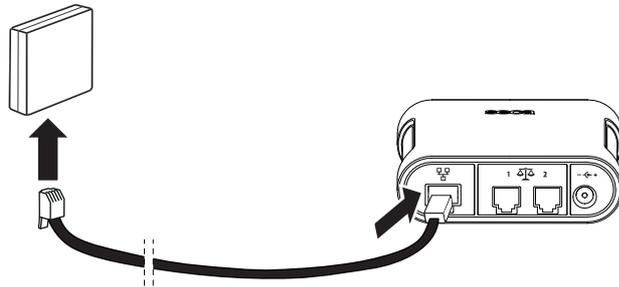
- d) Connect cable of cabled remote display to interface 2 of the **seca 452** interface module



You have the following options to continue:

- ▶ For communication via Ethernet, continue with step 2.
- ▶ For communication over WiFi, continue with step 3.

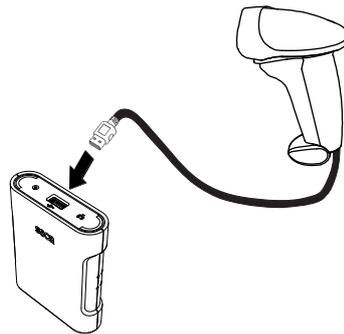
2. Connect an Ethernet cable to the **seca 452** interface module:
  - a) Connect the Ethernet cable to the Ethernet interface of the **seca 452** interface module
  - b) Connect the Ethernet cable to the network socket

**NOTICE!****Malfunction caused by an incompatible scanner**

Incompatible scanners can lead to faulty data transmission or system malfunction.

- ▶ Only use scanners that are listed in the section → [Optional accessories and spare parts](#).

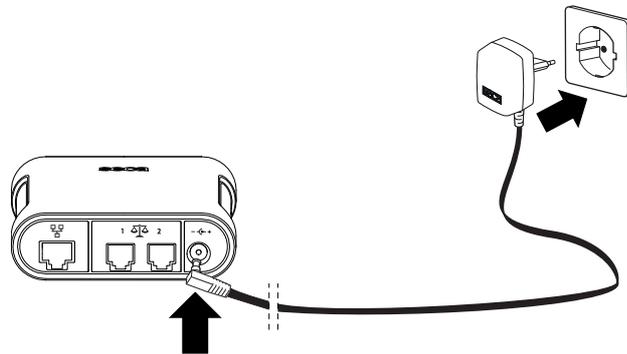
3. Connect a scanner to the **seca 452** interface module:
  - a) Connect the scanner cable to the USB interface of the **seca 452** interface module
  - b) Attach the scanner to the scanner bracket (if present)

**NOTICE!****Damage to device due to incorrect power supply unit**

The power supply unit of the scale is not suitable for operation with the **seca 452** interface module.

- ▶ Only use the power supply unit included in set 4520050009.

4. Connect the power supply unit to the **seca 452** interface module:
  - a) Connect the power cable to the power supply connection of the **seca 452** interface module
  - b) Insert the power supply unit into a power supply socket



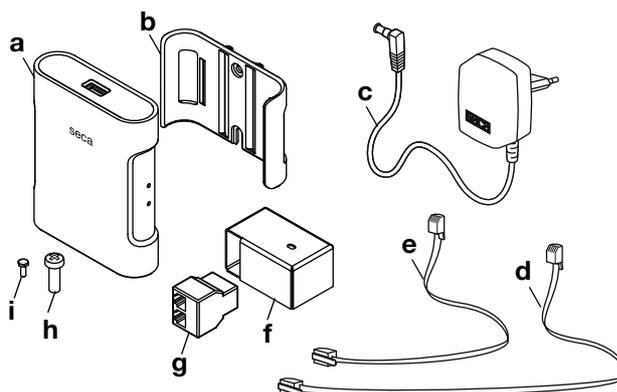
You have the following options to continue:

- ▶ **seca 452** interface module positioned next to the scale: continue with → [Performing final work](#)
- ▶ Mounting the **seca 452** interface module to the wall: continue with → [Mounting the seca 452 interface module to the wall](#)

## 6.4 Retrofitting multi-functional scales 645/644, 665/664, 667, 677/676, 685/684 (models with mounted display)

- Preparing the scale
- Connecting a seca 452 interface module
- Mounting the seca 452 interface module to the wall
- Performing final work

You need the following parts from set no. 4520050009:

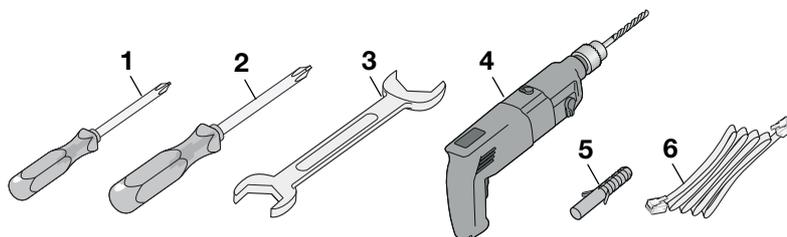


Pos.	Component	Pcs.
a	seca 452 interface module	1
b	Bracket	1
c	Power supply unit	1
d	Connecting cable, long	1
e	Connecting cable, short	1
f	Adapter housing for Y adapter	1
g	Y adapter	1
h	Cross-head screw	2
i	Hexagon bolt	1

### NOTE

The scanner brackets from the **seca 452** sets are not intended for wall installation. Use a suitable scanner bracket from the scanner manufacturer. Follow the instructions in the respective installation instructions.

Depending on the installation and connection version, you may need the following tools (not included in the scope of delivery):



Pos.	Component	Size	Pcs.
1	Cross-head screwdriver	PH 1	1
2	Cross-head screwdriver	PH 2	1
3	Wrench	5.5	1
4	Drill	Ø 5 mm	1
5	Wall plug	Ø 5 mm	2

<b>6</b>	Ethernet cable	n/a	1
----------	----------------	-----	---

**NOTICE!**

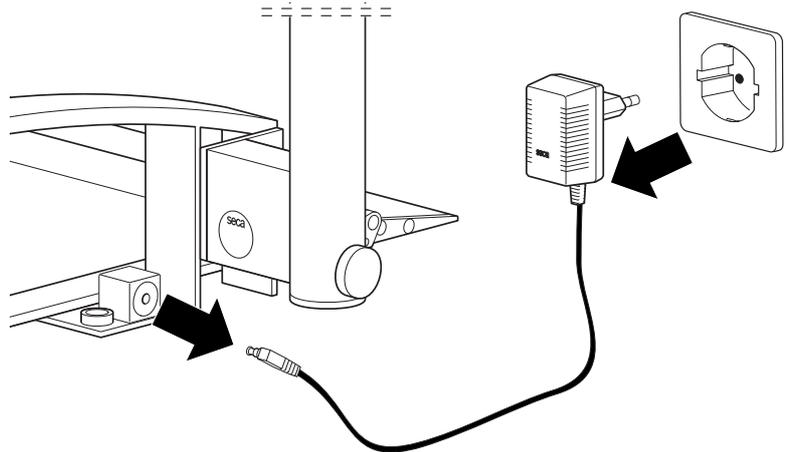
**Incorrect measurement as a result of force shunt**

If the accessories are mounted directly to the scale, faulty measurements can result.

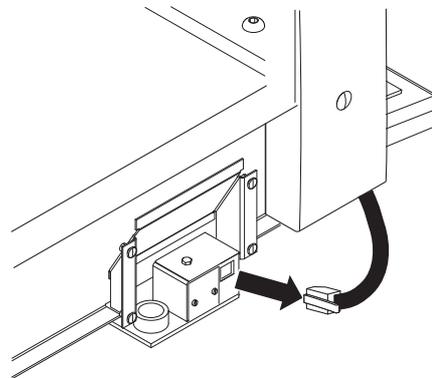
- ▶ Do not attach a scanner bracket to the scale.
- ▶ Do not attach the **seca 452** interface module to the scale.

**Preparing the scale**

1. Switch off the scale.
2. Disconnect the power supply unit from the power supply socket.
3. Pull the power cable out of the scale.

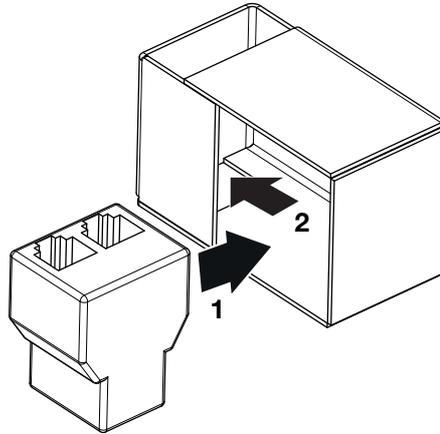


4. Only for models **seca 684** and **seca 685**: Pull the display cable from the scale.

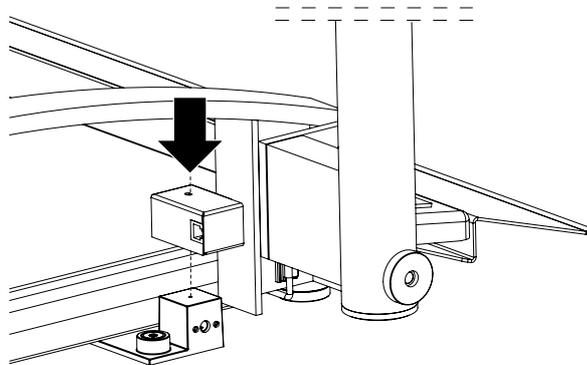


5. Assemble the Y adapter:

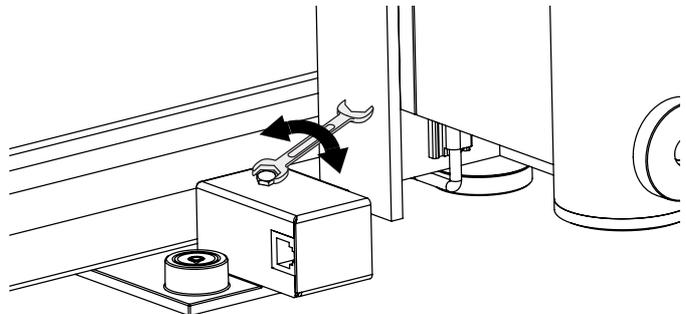
- a) Insert Y adapter into the adapter housing (1) and position according to the following figure (2)



- b) Turn adapter housing over and set it on the connection block of the scale



- c) Set hexagon bolt into the adapter housing and tighten with wrench



**CAUTION!****Personal injury, damage to device**

In the raised position, the scale is not steady.

- ▶ Use a second person to lift and hold the scale.
- ▶ If the scale needs to be held in a raised position for a longer period of time, secure it with suitable means to prevent it from falling over.

**CAUTION!****Personal injury, damage to device**

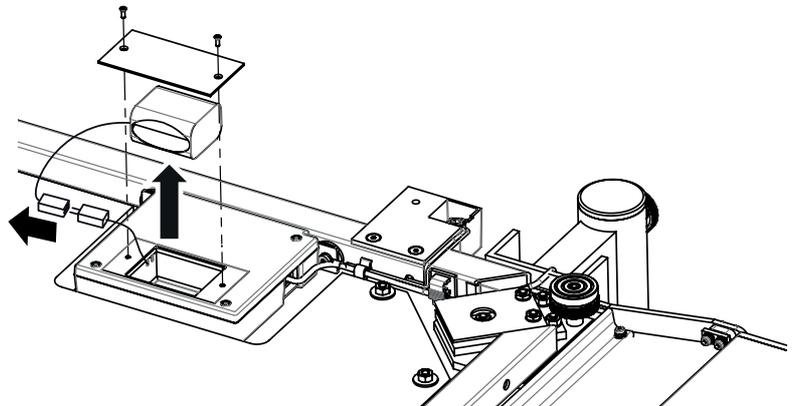
For some models of the scale, a folding seat is installed. Fingers can get crushed or the scale can be damaged if the folding seat is not folded up and secured.

- ▶ Fold the folding seat up and fold the legs of the seat in completely.
- ▶ Secure the folding seat with the locking bar.
- ▶ Follow the information in the instructions for use for the device.

**NOTE**

For **seca 676**, **seca 677**, **seca 684** and **seca 685**: Skip the following two steps and continue with step 8.

6. Lift the scale carefully so that the bottom of the weighing platform is accessible.
7. Remove the battery block:
  - a) Loosen the screws of the battery compartment
  - b) Remove the lid of the battery compartment
  - c) Remove battery block from the battery compartment and pull out the connector cable
  - d) Screw the lid onto the battery compartment



8. Store the power supply unit and the battery block (if present) or dispose of them properly (→ [Disposal](#)).

## Connecting a seca 452 interface module

### NOTICE!

#### Malfunction due to installation errors

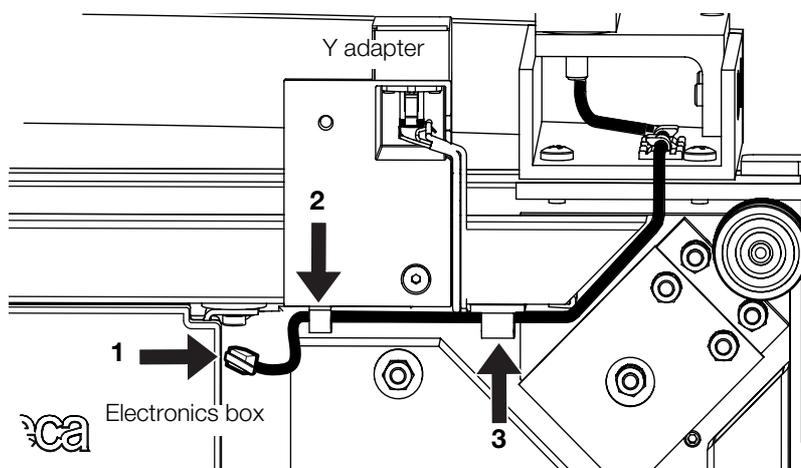
If cables are strained during installation, e. g. with sharp bends or kinked connectors, this may result in faulty displays and failure of the display.

- ▶ Route all cables to prevent sharp bends and kinked connectors.
- ▶ Provide strain relief by routing all cables in the relevant holders.

### NOTE

The following illustration of the bottom of the scale is an example. The cable routing may differ slightly depending on the model. The principle for the connection is the same for all models. Orient yourself on the cable that is connected to the electronics box.

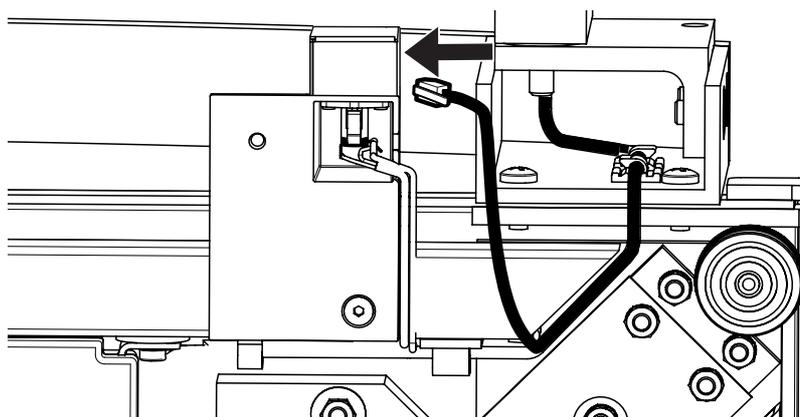
1. Connect the scale to the Y adapter:
  - a) Remove the display cable from the electronics box (1) and from the cable clips (2, 3)



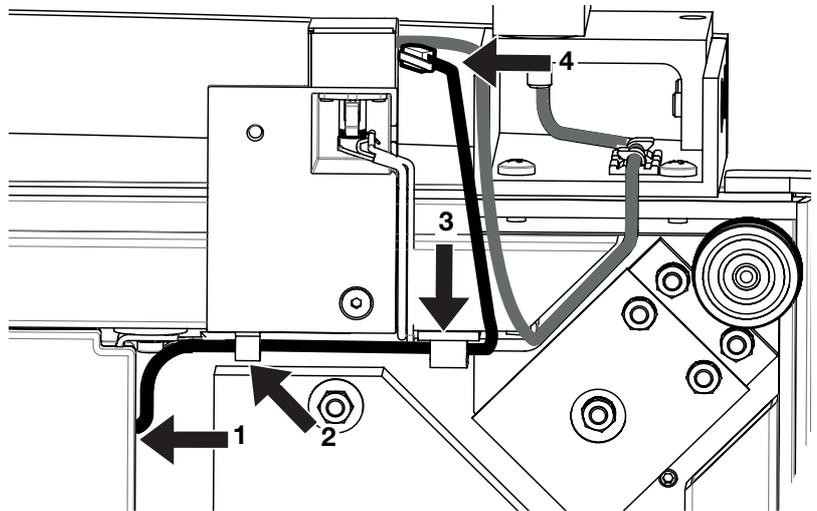
### NOTE

For the **seca 684** and **seca 685** models: The display cable in the next step is the cable from the display column that you have already removed from the scale in section → [Preparing the scale](#). The cable that you have removed from the electronics box (step 1a) is not connected again.

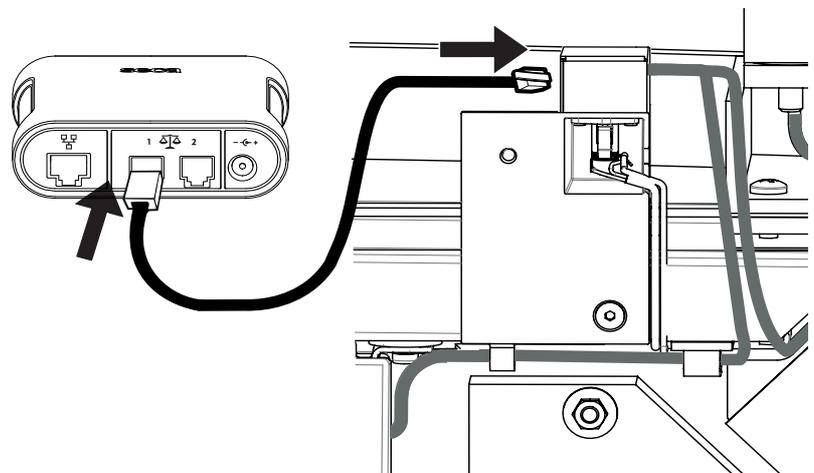
- b) Connect the display cable to the upper connection of the Y adapter



- c) Connect the short connecting cable to the electronics box (1)
- d) Secure the cable in the cable clips (2, 3)
- e) Connect the short connecting cable to the lower connection of the Y adapter (4)



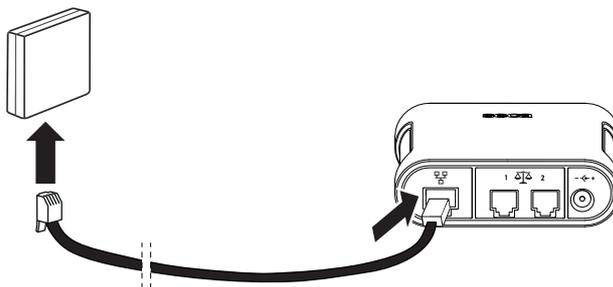
- 2. Place the scale onto the ground horizontally.
- 3. Connect the scale to the **seca 452** interface module:
  - a) Connect the long connecting cable to the connection of the Y adapter
  - b) Connect the long connecting cable to interface 1 of the **seca 452** interface module



You have the following options to continue:

- ▶ For communication via Ethernet, continue with step 4.
- ▶ For communication over WiFi, continue with step 5.

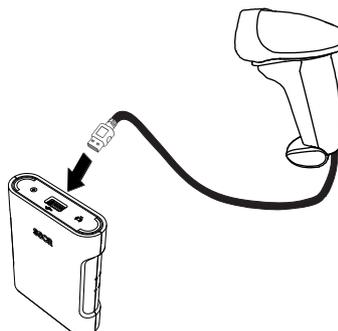
4. Connect an Ethernet cable to the **seca 452** interface module:
  - a) Connect the Ethernet cable to the Ethernet interface of the **seca 452** interface module
  - b) Connect the Ethernet cable to the network socket

**NOTICE!****Malfunction caused by an incompatible scanner**

Incompatible scanners can lead to faulty data transmission or system malfunction.

- ▶ Only use scanners that are listed in the section → [Optional accessories and spare parts](#).

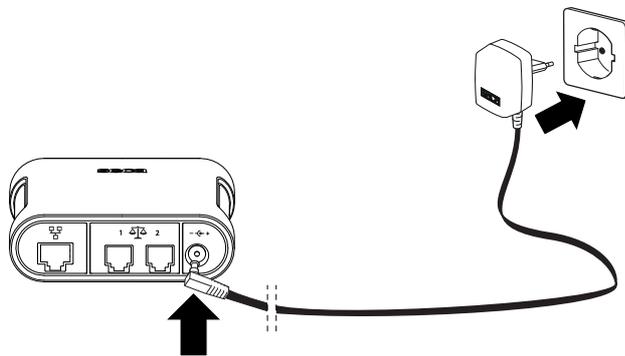
5. Connect a scanner to the **seca 452** interface module:
  - a) Connect the scanner cable to the USB interface of the **seca 452** interface module
  - b) Attach the scanner to the scanner bracket (if present)

**NOTICE!****Damage to device due to incorrect power supply unit**

The power supply unit of the scale is not suitable for operation with the **seca 452** interface module.

- ▶ Only use the power supply unit included in set 4520050009.

6. Connect the power supply unit to the **seca 452** interface module:
  - a) Connect the power cable to the power supply connection of the **seca 452** interface module
  - b) Insert the power supply unit into a power supply socket



You have the following options to continue:

- ▶ **seca 452** interface module positioned next to the scale: continue with → [Performing final work](#)
- ▶ Mounting the **seca 452** interface module to the wall: continue with → [Mounting the seca 452 interface module to the wall](#)

#### **NOTICE!**

##### **Incorrect measurement as a result of force shunt**

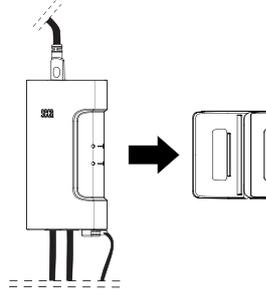
If the accessories are mounted directly to the scale, faulty measurements can result.

- ▶ Do not attach the **seca 452** interface module to the scale.

## 6.5 Mounting the seca 452 interface module to the wall

Proceed as follows to mount the **seca 452** interface module to the wall:

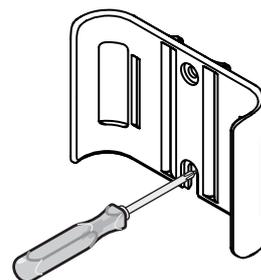
1. Press the wired **seca 452** interface module into the bracket.



2. Determine the optimal position on the wall according to the specifications in the section → [Selecting a location](#).
3. Mark the drill holes on the wall:
  - a) Tilt the **seca 452** interface module forward and mark the position of the upper hole of the bracket with a screwdriver or marker

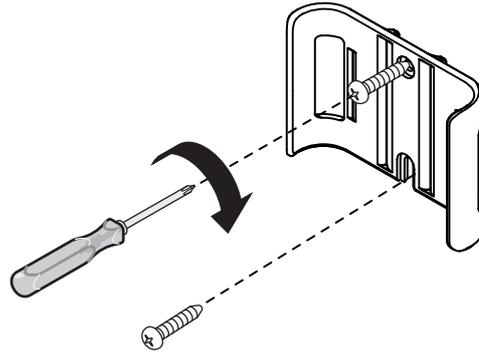


- b) Remove the **seca 452** interface module from the bracket
- c) Place the bracket on the wall so that the marking is located in the middle of the upper hole
- d) Mark the position in the lower hole of the bracket



4. Drill the holes with a drill bit that is suitable for the wall material.
5. Use wall plugs that are suitable for the wall material.

6. Screw the bracket securely to the wall with two cross-head screws.



7. Press the wired **seca 452** interface module into the bracket.

8. Perform the necessary final work, → [Performing final work](#).

## 6.6 Retrofitting column scale 704

→ [Preparing the scale](#)

→ [Mounting the seca 452 interface module](#)

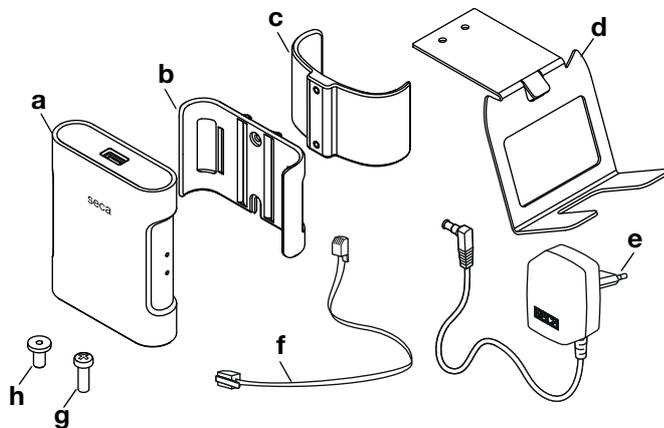
→ [Installing the scanner bracket](#)

→ [Connecting a seca 452 interface module](#)

→ [Performing final work](#)

The **seca 703** column scale cannot be retrofitted by the customer. Please contact seca Service to retrofit the **seca 703**.

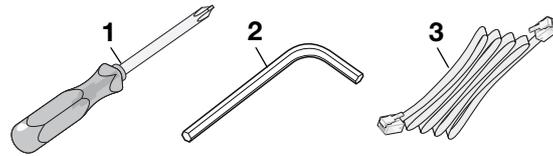
You need the following parts from set no. 4520050009:



Pos.	Component	Pcs.
a	seca 452 interface module	1
b	Bracket	1
c	Column bracket	1
d	Scanner bracket	1
e	Power supply unit	1
f	Connecting cable, short	1
g	Cross-head screw	2
h	Hex head socket screw	2

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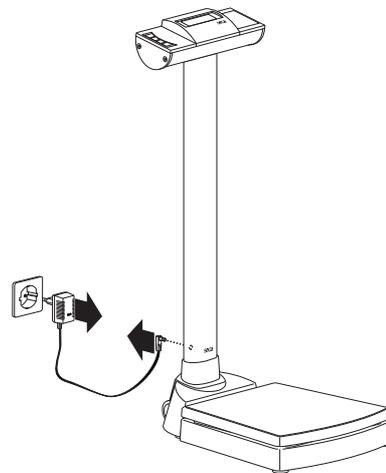
Depending on the installation and connection version, you may need the following tools (not included in the scope of delivery):



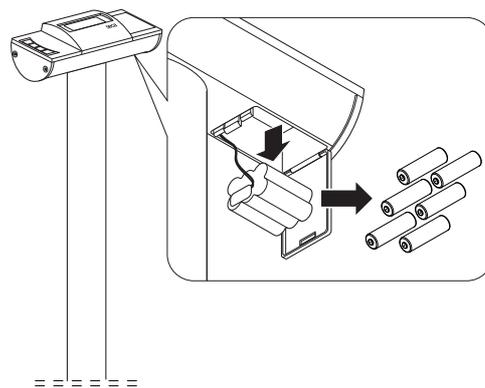
Pos.	Component	Size
1	Cross-head screwdriver	PH 1
2	Hex socket wrench	4.0
3	Ethernet cable	n/a

## Preparing the scale

1. Switch off the scale.
2. Disconnect the power supply unit from the power supply socket.
3. Pull the power cable out of the scale.



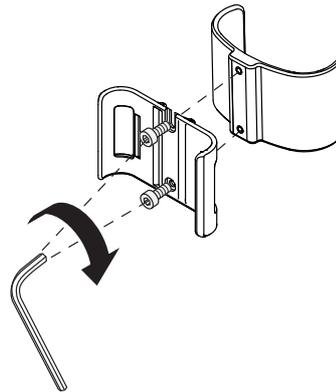
4. Remove the batteries:
  - a) Press the latch of the battery compartment
  - b) Open the lid of the battery compartment
  - c) Remove batteries from the battery holder
  - d) Put battery holder back and close lid again



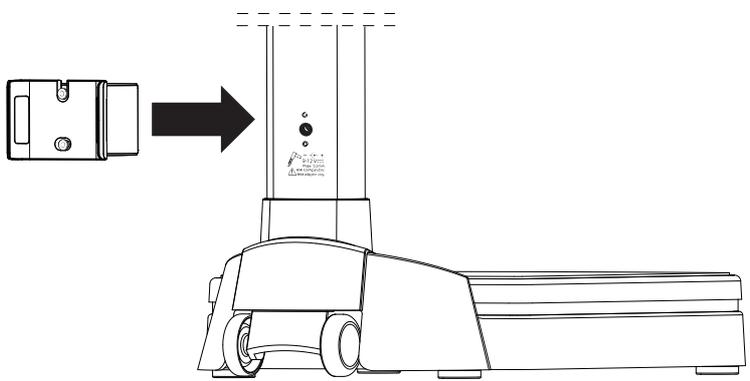
5. Store the power supply unit and the batteries or dispose of them properly (→ [Disposal](#)).

## Mounting the seca 452 interface module

1. Screw the bracket to the column bracket with two hex head socket screws.



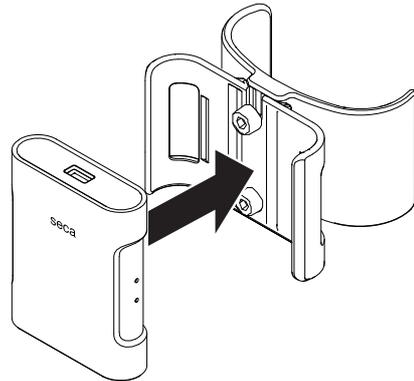
2. Press the column bracket onto the column at the height of the power supply connection.



### NOTE

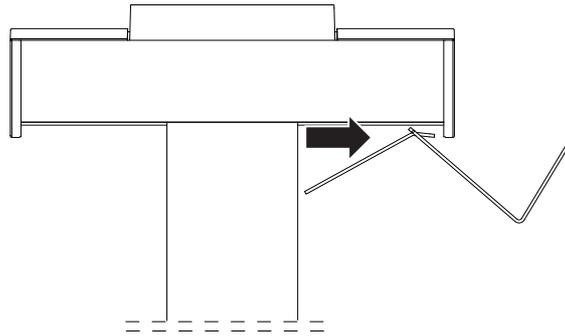
The power supply connection is no longer needed, the column bracket can completely cover the power supply connection.

3. Press the **seca 452** interface module into the bracket.

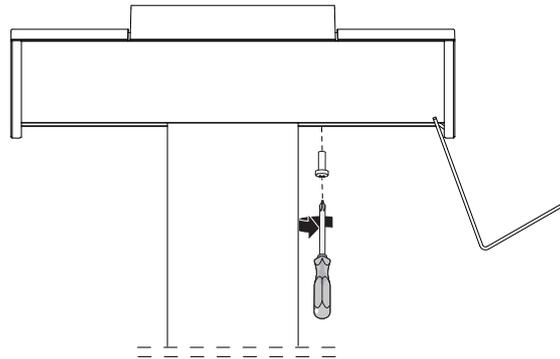


## Mounting the scanner bracket

1. Attach the scanner bracket to the desired side part of the display housing.



2. Screw the scanner bracket to the bottom of the display housing with two cross-head screws.



## Connecting a seca 452 interface module

1. Carefully tilt the scale so that you can easily access the connections on the bottom of the scale.

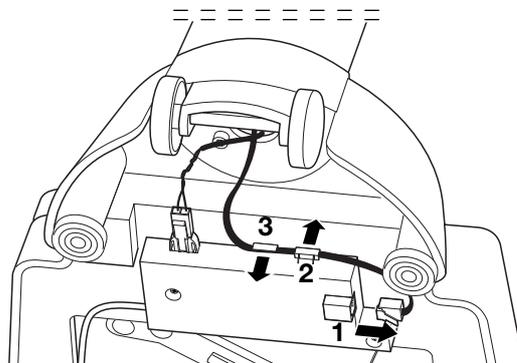
### NOTICE!

#### Malfunction due to installation errors

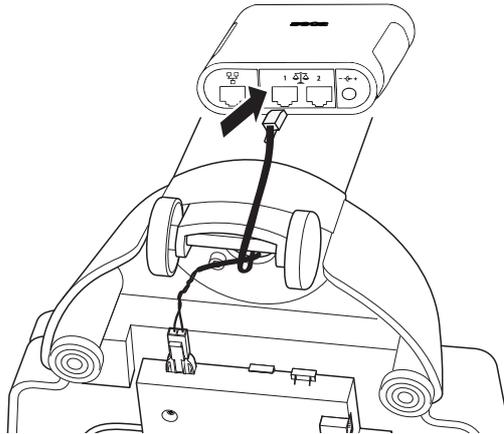
If cables are strained during installation, e. g. with sharp bends or kinked connectors, this may result in faulty displays and failure of the display.

- ▶ Route all cables to prevent sharp bends and kinked connectors.
- ▶ Provide strain relief by routing all cables in the relevant holders.

2. Connect the scale to the **seca 452** interface module:
  - a) Remove cable from the display electronics from the interface of the electronics box (1) and from the cable clips (2, 3)

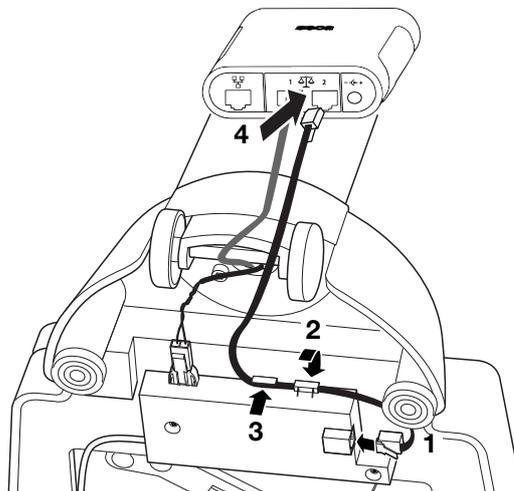


- b) Connect cable of the display electronics to interface 1 of the **seca 452** interface module



- c) Connect the short connecting cable to the interface of the electronics box (1) and secure in the cable clips (2, 3)

- d) Connect the short connecting cable to interface 2 of the **seca 452** interface module (4)



- e) Position the scale upright

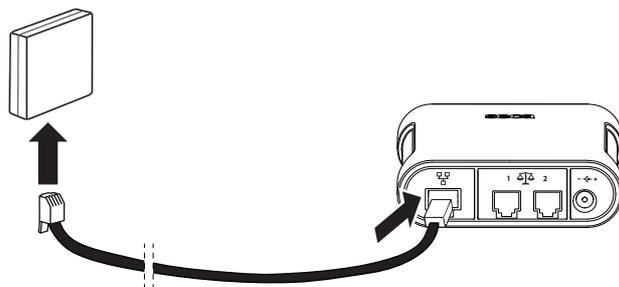
You have the following options to continue:

- ▶ For communication via Ethernet, continue with step 3.
- ▶ For communication over WiFi, continue with step 4.

3. Connect an Ethernet cable to the **seca 452** interface module:

- a) Connect the Ethernet cable to the Ethernet interface of the **seca 452** interface module

- b) Connect the Ethernet cable to the network socket

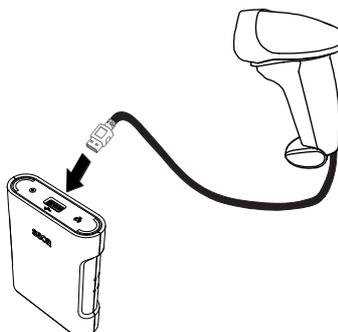


**NOTICE!****Malfunction caused by an incompatible scanner**

Incompatible scanners can lead to faulty data transmission or system malfunction.

- ▶ Only use scanners that are listed in the section → [Optional accessories and spare parts](#).

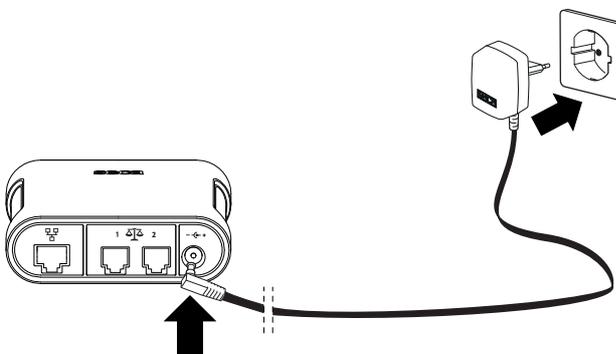
4. Connect a scanner to the **seca 452** interface module:
  - a) Connect the scanner cable to the USB interface of the **seca 452** interface module
  - b) Attach the scanner to the scanner bracket

**NOTICE!****Damage to device due to incorrect power supply unit**

The power supply unit of the scale is not suitable for operation with the **seca 452** interface module.

- ▶ Only use the power supply unit included in set 4520050009.

5. Connect the power supply unit to the **seca 452** interface module:
  - a) Connect the power cable to the power supply connection of the **seca 452** interface module
  - b) Insert the power supply unit into a power supply socket

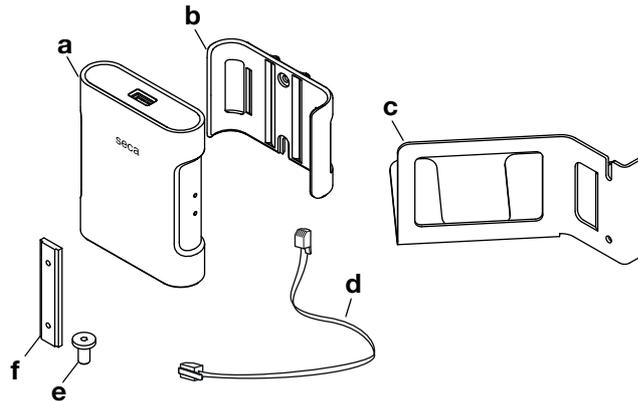


6. Perform the necessary final work, → [Performing final work](#).

## 6.7 Retrofitting measuring stations 285/284, 287/286

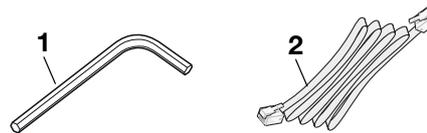
- Preparing the measuring station
- Installing the seca 452 interface module
- Mounting the scanner bracket
- Connecting a seca 452 interface module
- Performing final work

You need the following parts from set no. 452000009:



Pos.	Component	Pcs.
<b>a</b>	seca 452 interface module	1
<b>b</b>	Bracket	1
<b>c</b>	Scanner bracket	1
<b>d</b>	Connecting cable	1
<b>e</b>	Hex head socket screw	4
<b>f</b>	Sliding block	2

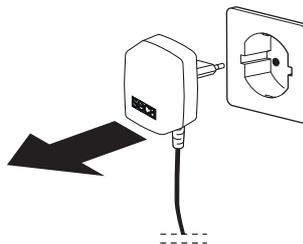
Depending on the desired installation and connection version, you may need the following tools (not included in the scope of delivery):



Pos.	Component	Size
<b>1</b>	Hex socket wrench	4.0
<b>2</b>	Ethernet cable	n/a

## Preparing the measuring station

1. Switch the measuring station off.
2. Disconnect the power supply unit from the power supply socket.



### CAUTION! Risk of injury and damage to device

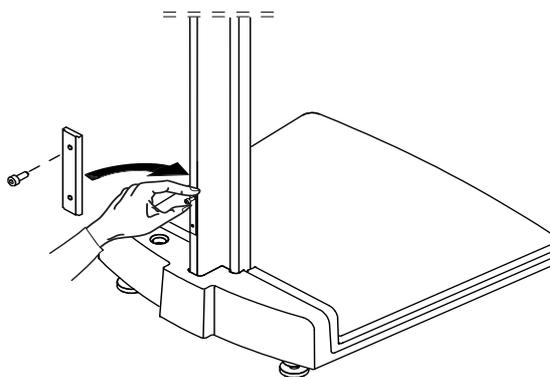
The device must be tilted. The large overall height of the device can result in injuries and damage to the device.

- ▶ Ensure that there are no other persons in the immediate vicinity.
- ▶ Ensure that there are no objects in the immediate vicinity.

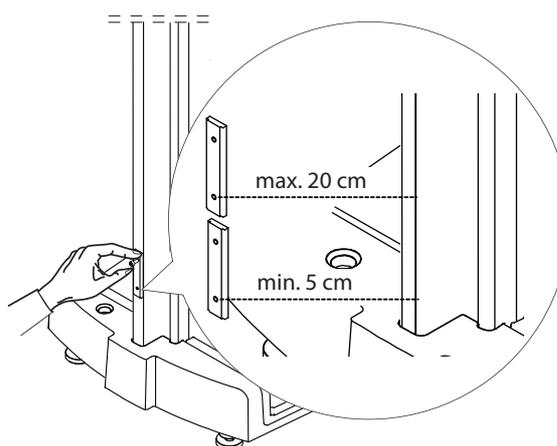
3. Slightly lift the measuring station and pull off the power cable.

## Installing the seca 452 interface module

1. Put a hex head socket screw into a sliding block and guide the sliding block into the groove of the column.

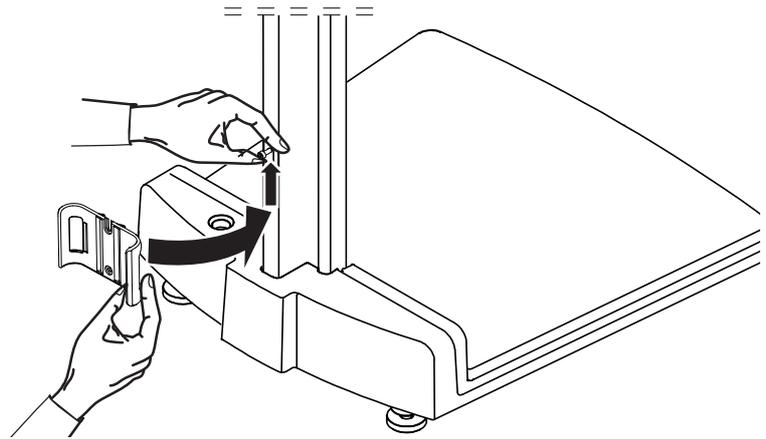


2. Hold the sliding block in position as shown in the following figure.

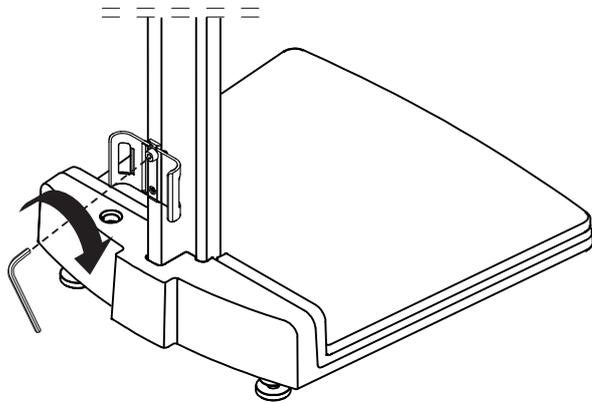


3. Position the bracket on the sliding block.

4. Push the bracket with the recess upward under the head of the hex head socket screw.

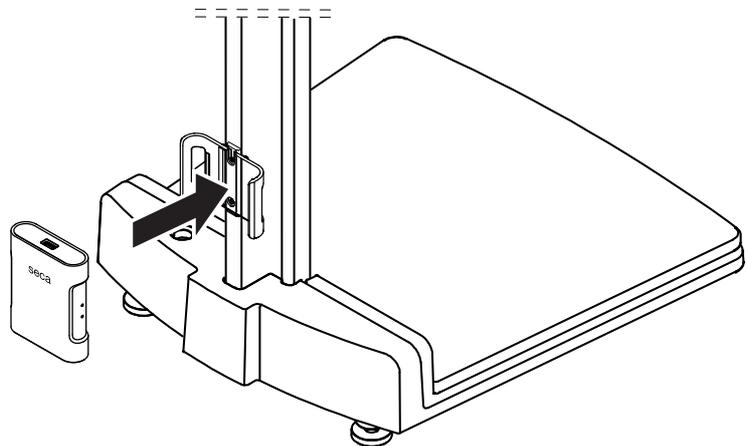


5. Screw the hex head socket screw tight.



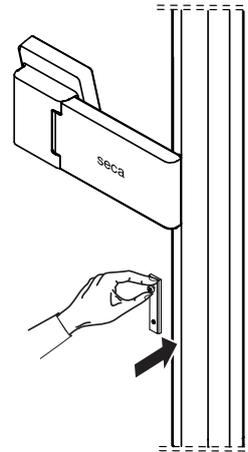
6. Screw the bracket tight with a second hex head socket screw.

7. Press the **seca 452** interface module into the bracket.

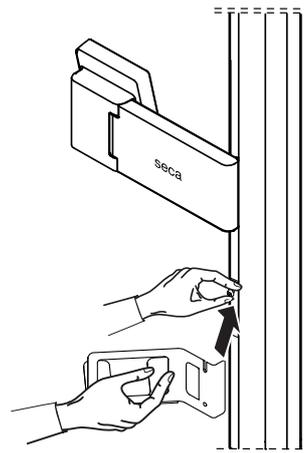


## Installing the scanner bracket

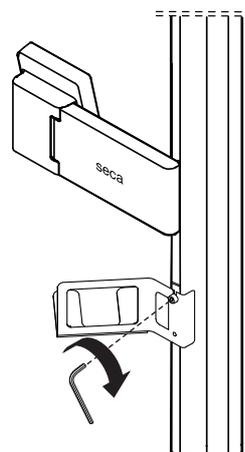
1. Put a hex head socket screw into the sliding block.
2. Thread the sliding block below the multi-functional display into the groove of the column.



3. Hold the sliding block securely.
4. Position the scanner bracket on the sliding block.
5. Push the scanner bracket with the recess upward under the head of the hex head socket screw.



6. Screw the hex head socket screw tight.



7. Screw the scanner bracket tight with a second hex head socket screw.

## Connecting a seca 452 interface module

### NOTICE!

#### Malfunction as a result of faulty multi-functional display

When the device is laid down, the multi-functional display is directly on the floor and may be damaged.

- ▶ Lay the device down slowly and carefully on a soft surface, a blanket, for example.

1. Lift the measuring station at the rear and carefully tilt it forward.

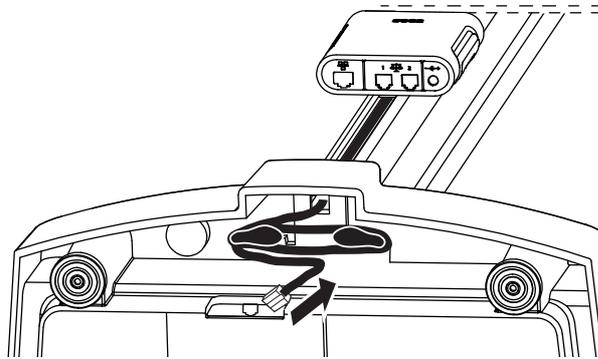
### NOTICE!

#### Malfunction due to installation errors

If cables are strained during installation, e. g. with sharp bends or kinked connectors, this may result in faulty displays and failure of the display.

- ▶ Route all cables to prevent sharp bends and kinked connectors.
- ▶ Provide strain relief by routing all cables in the relevant holders.

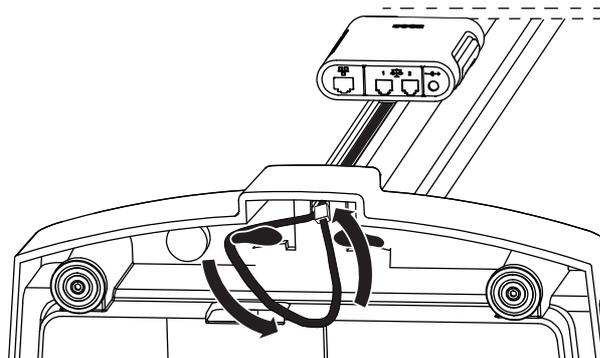
2. Connect the multi-functional display to the **seca 452** interface module:
  - a) Remove cable of the multi-functional display from the electronics box



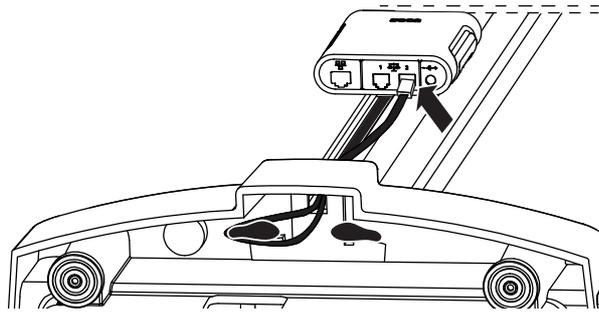
- b) With the cable, make a loop and push the end of the cable upward through the hole

### NOTE

Depending on the cable length, you can guide the cable past one or both cable storage posts.

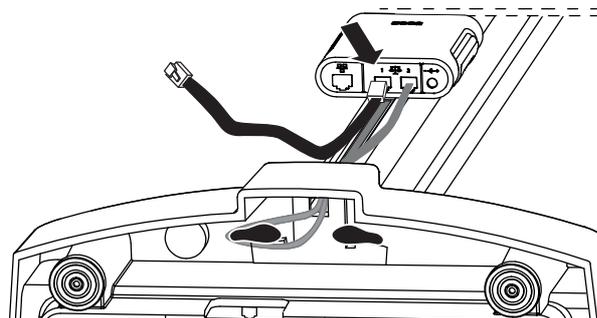


c) Connect cable to interface 2 of the **seca 452** interface module

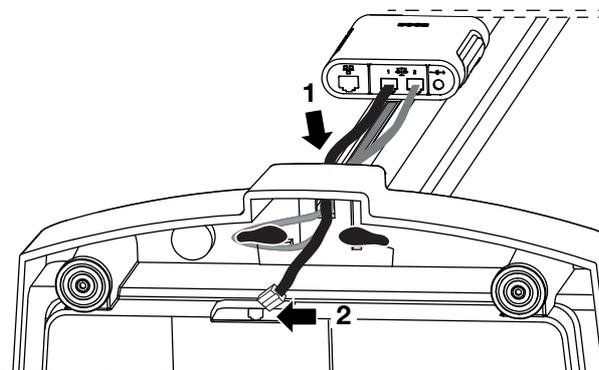


3. Connect the measuring station to the **seca 452** interface module:

a) Connect the connecting cable to interface 1 of the **seca 452** interface module



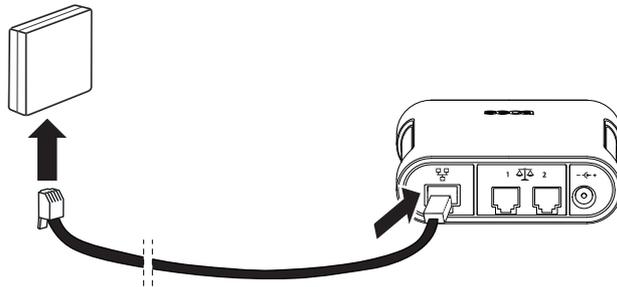
b) Push the connecting cable down through the hole and connect to the electronics box



4. Carefully place the measuring station onto the ground horizontally.  
You have the following options to continue:

- ▶ For communication via Ethernet, continue with step 5.
- ▶ For communication over WiFi, continue with step 6.

5. Connect an Ethernet cable to the **seca 452** interface module:
  - a) Connect the Ethernet cable to the Ethernet interface of the **seca 452** interface module
  - b) Connect the Ethernet cable to the network socket



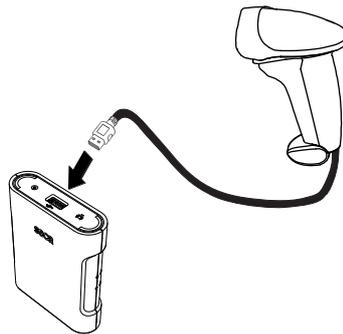
**NOTICE!**

**Malfunction caused by an incompatible scanner**

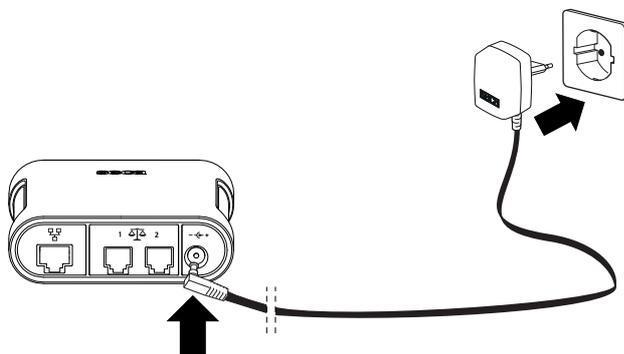
Incompatible scanners can lead to faulty data transmission or system malfunction.

- ▶ Only use scanners that are listed in the section → [Optional accessories and spare parts](#).

6. Connect a scanner to the **seca 452** interface module:
  - a) Connect the scanner cable to the USB interface of the **seca 452** interface module
  - b) Attach the scanner to the scanner bracket



7. Connect the power supply unit to the **seca 452** interface module:
  - a) Connect the power cable to the power supply connection of the **seca 452** interface module
  - b) Insert the power supply unit into a power supply socket



8. Perform the necessary final work, → [Performing final work](#).

## 6.8 Performing final work

Once you have completed the retrofitting of the measuring devices, perform the following steps:

- ▶ Ensure that the device is positioned on the ground flat and stable.
- ▶ Ensure that no cables or other parts touch the weighing platform.
- ▶ Perform a function check of the device as described in the respective instructions for use.
- ▶ Remove all tools and materials.
- ▶ Clean the floor and other installation areas.
- ▶ Clean and disinfect the measuring devices as described in the respective instructions for use.
- ▶ Clean and disinfect your hands.

You have the following options to continue:

- ▶ Add a seca measuring device in the **seca connect 103** software:  
→ [Adding a seca measuring device](#)
- ▶ Change the configuration of a seca measuring device in the **seca connect 103** software: → [Changing a setting of a seca measuring device](#)

## 7. OPERATING CONNECTED SECA MEASURING DEVICES

→ [Functional limitations](#)

→ [Workflow for measurement procedure](#)

### Functional limitations

If you connect seca measuring devices to the **seca connect 103**, a number of functions of the seca measuring devices may not be used or only used with limitations. Otherwise, the following faults can occur:

- Malfunction of individual devices
- Transmission of invalid measured values
- Incorrect allocation of measured values to patient files
- ▶ Observe the instructions for use of the seca measuring devices.
- ▶ Inform your users about these limitations. To do so, use the quick reference “Measurement procedure” → [Annex: Quick reference: Measurement procedure](#).

Function	Device type	How to use
<b>hold</b>	All	Do not use
<b>bmi</b>	Column scale Measuring stations Multi-functional scales	Do not use
<b>send/print<sup>a</sup></b>	All <b>seca 360°</b> devices	Do not use
<b>2 in 1</b>	Column scale Measuring stations	<ul style="list-style-type: none"> <li>• Press the button after each measurement to delete <b>2 in 1</b> value from device memory</li> <li>• Deactivate ultrasound length measurement (for example, models <b>seca 287</b>, <b>seca 286</b>)</li> </ul>
<b>clear</b>	Measuring stations	Press button <b>before</b> each measurement to delete old length measurement value from device memory

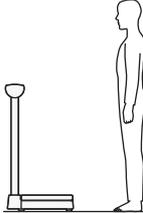
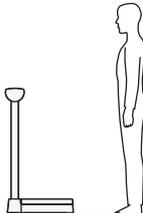
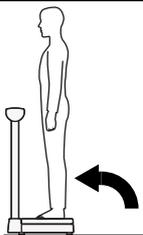
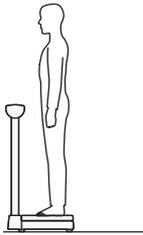
Function	Device type	How to use
<b>tare</b>	Baby scales Multi-functional scales	Press the button after each measurement to delete tare value from device memory
<b>BMIF</b>	Baby scales	Deactivate before measurement is confirmed on seca measuring device

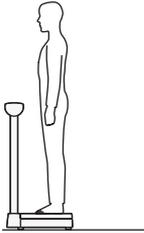
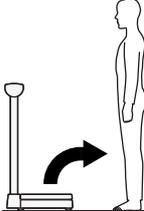
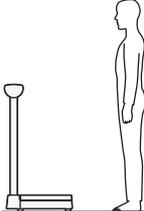
a. The send/print button on the head slide of the **seca 285/seca 284** can be used as usual.

## Workflow for measurement procedure

To record measured values with seca measuring devices and to send to an EMR system, the procedure described in this section must be adhered to. Otherwise, the following faults can occur:

- Malfunction of individual devices
  - Transmission of invalid measured values
  - Incorrect allocation of measured values to patient files
- Observe the instructions for use of the seca measuring devices.
- Inform your users about this procedure. To do so, use the quick reference “Measurement procedure” → [Annex: Quick reference: Measurement procedure](#)

seca 452 interface module	seca measuring device	Patient	User
1. 			<ul style="list-style-type: none"> <li>• Ensure that the device is switched on</li> <li>• Ensure that Power LED and Network LED are green</li> </ul>
2. 			Scan patient/user IDs (according to <b>Device settings</b> )
3. 			Ask patient to step onto the scale
4. 			Wait until measured value is shown continuously

seca 452 interface module	seca measuring device	Patient	User
5. 			Scan Confirm barcode or press Confirm button on seca measuring device (according to <b>Device settings</b> )
6. 			<ul style="list-style-type: none"> <li>• Wait until Workflow LED is green</li> <li>• Ask patient to leave seca measuring device</li> </ul>
7. 			<ul style="list-style-type: none"> <li>• Wait until Workflow LED goes out</li> <li>• Measured value remains shown in display</li> <li>• Device is ready for another measurement</li> </ul>

**NOTE**

If desired in your institution, you can perform steps 2. and 3. in the opposite order.

## 8. HYGIENIC TREATMENT OF THE SECA 452 INTERFACE MODULE

- [Cleaning](#)
- [Disinfecting](#)
- [Sterilizing](#)



### **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.



### **CAUTION!** **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).

### 8.1 Cleaning

---

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

### 8.2 Disinfecting

---

1. Check that your disinfectant is suitable for sensitive surfaces and acrylic sheet.
2. Follow the instructions for use for the disinfectant.
3. Disinfect the device by moistening a soft cloth in disinfectant and wiping down the device.

### 8.3 Sterilizing

---

This device may not be sterilised.

## 9. 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 “Troubleshooting” 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 “Troubleshooting” 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” in this document.

## 10. SERVICING

The measuring technology of this device must be checked every two years. We recommend servicing the whole device as part of this check.

### **NOTICE!**

#### **Incorrect measurements as a result of poor servicing**

- ▶ Have servicing and repairs carried out exclusively by seca Service or by an authorized service partner.
- ▶ You can find service partners in your area at [www.seca.com](http://www.seca.com) or by sending an e-mail to [service@seca.com](mailto:service@seca.com).

# 11. TROUBLESHOOTING

- [Errors in the system](#)
- [Malfunctions during measurement procedure](#)

## 11.1 Errors in the system

Problem	Cause	Remedy
<b>seca connect 103 cannot be started</b>	Server does not fulfill system requirements	Comply with system requirements → <a href="#">System requirements</a>
	Operating system does not fulfill system requirements	
<b>seca connect 103 cannot be opened</b>	Port in the firewall is not enabled	→ <a href="#">Configuring the firewall</a> Check settings for all firewalls in the system
	Browser does not fulfill the system requirements	Comply with system requirements → <a href="#">System requirements</a>
<b>seca measuring device does not appear in the Device list after scanning the QR code</b>	seca measuring device switched off	seca measuring device switched on
	Scanner not compatible	Use compatible scanner: → <a href="#">Compatible seca measuring devices</a>
	Scanner defective	Replace scanner → <a href="#">Compatible seca measuring devices</a>
	<b>Timeout Transmisson error</b> implausible	Modify settings: → <a href="#">Changing a setting of a seca measuring device</a>
	Port in the firewall is not enabled	<ul style="list-style-type: none"> <li>• → <a href="#">Configuring the firewall</a></li> <li>• Check settings for all firewalls in the system</li> </ul>
	Settings in security program implausible	<ul style="list-style-type: none"> <li>• → <a href="#">Configuring the security program</a></li> <li>• Check settings for all security programs in the system</li> </ul>
<b>seca measuring device appears in the Device list as Offline</b>	seca measuring device switched off	seca measuring device switched on
	Ethernet cable not connected	Connect Ethernet cable
	Network socket not patched	Patch network socket
	WiFi connection disconnected	<ul style="list-style-type: none"> <li>• Check availability of WiFi network</li> <li>• Reconnect seca measuring device:                             <ul style="list-style-type: none"> <li>- Switch off the device</li> <li>- → <a href="#">Deleting a device</a></li> <li>- → <a href="#">Adding a seca measuring device</a></li> </ul> </li> </ul>
	Port in firewall not (or no longer) enabled	<ul style="list-style-type: none"> <li>• → <a href="#">Configuring the firewall</a></li> <li>• Check settings for all firewalls in the system</li> </ul>
	seca measuring device defective	<ul style="list-style-type: none"> <li>• Use replacement device</li> <li>• Have device repaired</li> </ul>
<b>seca measuring device appears in Device list as Offline and as Online</b>	seca measuring device has received a new IP address	Delete entry of device shown as <b>Offline</b> from the <b>Device list</b>

Problem	Cause	Remedy
<b>Data is not transmitted or transmission to EMR system is defective</b>	Activate <b>seca 360° wireless</b> function on seca measuring device	<ul style="list-style-type: none"> <li>Deactivate <b>seca 360° wireless</b></li> <li>Observe instructions for use of seca measuring device</li> </ul>
	Activate ultrasound length measurement (device-dependent) on seca measuring device	<ul style="list-style-type: none"> <li>Deactivate ultrasound length measurement</li> <li>Observe instructions for use of seca measuring device</li> </ul>
	<b>Autohold</b> deactivated on seca measuring device	<ul style="list-style-type: none"> <li>Activate <b>Autohold</b></li> <li>Observe instructions for use of seca measuring device</li> </ul>
	EMR system: Interface settings implausible	<ul style="list-style-type: none"> <li>Modify interface settings</li> <li>Request support from manufacturer of EMR system</li> </ul>
	<b>seca connect 103</b> : Settings in integration module implausible	<ul style="list-style-type: none"> <li>Modify integration module settings</li> <li>Request support from manufacturer of EMR system</li> </ul>
	<b>seca connect 103</b> : No integration module activated or incorrect integration module activated	<ul style="list-style-type: none"> <li>Activate compatible integration module → <a href="#">Managing integration modules</a></li> </ul>
	Port in the firewall is not enabled	<ul style="list-style-type: none"> <li>→ <a href="#">Configuring the firewall</a></li> <li>Check settings for all firewalls in the system</li> </ul>
	Settings in security program implausible	<ul style="list-style-type: none"> <li>→ <a href="#">Configuring the security program</a></li> <li>Check settings for all security programs in the system</li> </ul>
After change to integration module: do not restart connected <b>seca</b> measuring devices	Restart the service "seca 103.dll" (in Windows® under "Task Manager\Services")	

## 11.2 Malfunctions during measurement procedure

The visual error messages in this table relate to the **seca 452** interface module. If your seca measuring device has an internal interface module, you can find information about the visual error messages in the instructions for use of the seca measuring device.

The messages in the display of the seca measuring device are independent of whether the **seca 452** interface module or an internal interface module is used.

Visual error message seca 452	Display seca measuring device	Cause	Remedy
	<b>Measurement result</b>	Measurement results ready for data transmission	<ul style="list-style-type: none"> <li>Ask patient to leave seca measuring device</li> <li>Wait until Workflow LED goes out</li> <li>Repeat measurement procedure</li> </ul>
	<b>Er:8:91</b>	No connection to the <b>seca connect 103</b>	→ <a href="#">seca measuring device appears in the Device list as Offline</a>
	<b>Er:8:92</b>	Barcode not detected	<ul style="list-style-type: none"> <li>Barcode mechanically damaged</li> <li>ID not present in EMR system</li> <li>Transmission error</li> </ul>

Visual error message seca 452	Display seca measuring device	Cause	Remedy
	<b>Er:8:93</b>	No connection to EMR system	→ Data is not transmitted or transmission to EMR system is defective
-	<b>Er:8:94</b>	seca measuring device blocked, for example, while a barcode is being scanned	<ul style="list-style-type: none"> <li>• End current action</li> <li>• Restart measurement procedure</li> </ul>
	-	No connection to the network (Ethernet/WiFi)	→ <a href="#">seca measuring device appears in the Device list as Offline</a>

## 12. TECHNICAL DATA

→ [seca connect 103 software](#)

→ [seca 452 interface module](#)

### 12.1 [seca connect 103 software](#)

→ [seca TestModule: Barcodes](#)

→ [Integration module Cerner VitalsLink: Parameter](#)

#### seca TestModule: Barcodes

You can use the following barcodes to perform system tests with the **seca TestModule** integration module. Please contact seca Service if you have any questions.

Barcode for function test with seca TestModule	
Function	Barcode
User ID	 IESECA
Patient ID	 FN2222225852
Confirm	 secaConfirm

## Integration module Cerner VitalsLink: Parameter

### NOTE

- Only make settings in the integration module with support from the manufacturer of your EMR system.
- The table contains parameters for currently supported seca measuring devices. Some parameters of the integration module are intended for system upgrades and are not described here. Instead, placeholders [...] are displayed.

Cerner VitalsLink			
Field	Description	Possible values	Example
<b>Manual affix configuration</b>	Use manual affix configuration instead of automatic affix configuration via Cerner VitalsLink.	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Set to 'Yes' to use the manual affix configuration otherwise, set to 'No'.
<b>Staff prefixes</b>	Staff prefixes	comma separated list	FN,NM
<b>Staff postfixes</b>	Staff postfixes	comma separated list	RX,LM
<b>Patient prefixes</b>	Patient prefixes	comma separated list	KL,TE,FO
<b>Patient postfixes</b>	Patient postfixes	comma separated list	TM,PA
<b>Cerner VitalsLink active</b>	Activate or deactivate Cerner VitalsLink integration	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Set to 'Yes' to activate the Cerner VitalsLink integration. Otherwise, set to 'No'.
<b>API version</b>	Version of API used for Cerner VitalsLink	<ul style="list-style-type: none"> <li>• Legacy</li> <li>• V1</li> </ul>	Set to 'Legacy' to use the legacy version of the Cerner VitalsLink API or set to 'V1' to use version 1 of the API.
<b>Organization ID</b>	Identifier of the organization for this installation	string	123456
<b>iBus base URL</b>	Base URL of iBus framework	string	http://localhost:3000/ibus
<b>Tenant ID</b>	Identification number of the tenant of a cloud installation	string	
<b>Cerner VitalsLink username</b>	Username for the Cerner VitalsLink interface	string	SECA
<b>Cerner VitalsLink password</b>	Password for Cerner VitalsLink interface	string	
<b>Patient context ID</b>	Context identifier of patients for this installation	string	FIN
<b>Patient issuer</b>	Patient issuer for this installation	string	CERNER_MILLENNIUM
<b>Encounter class</b>	Encounter class for this installation in the specific application	string	
<b>Use the device time</b>	The server time is used for deactivation	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Set to 'No' to deactivate server time usage. Otherwise, set to 'Yes'.
<b>Exclude keyword</b>	Exclude any parameter when sending to Cerner VitalsLink interface by using the typed-in keyword	string	
<b>Decimal delimiter</b>	Decimal delimiter for numerical values	string	.
<b>Mass</b>	Unit for the parameter "Mass"	<ul style="list-style-type: none"> <li>• Grams</li> <li>• Kilograms</li> <li>• pounds</li> <li>• stones</li> </ul>	Kilograms

Cerner VitalsLink			
Field	Description	Possible values	Example
Length	Unit for the seca 452 parameter "Length"	<ul style="list-style-type: none"> <li>• Meters</li> <li>• Foot</li> <li>• Centimeters</li> <li>• Inches</li> </ul>	Foot
...	...	...	...
Height	Identifier for the parameter "Height"	string	Height
Meters	Identifier for the parameter "Meters"	string	m
Foot	Identifier for the parameter "Foot"	string	ft
Centimeters	Identifier for the parameter "Centimeters"	string	cm
Inches	Identifier for the parameter "Inches"	string	in
Weight	Identifier for the parameter "Weight"	string	Weight
Kilograms	Identifier for the parameter "Kilograms"	string	kg
Grams	Identifier for the parameter "Grams"	string	g
pounds	Identifier for the parameter "Pounds"	string	lbs
...	...	...	...

## 12.2 seca 452 interface module

seca 452 interface module	
Dimensions <ul style="list-style-type: none"> <li>• Depth</li> <li>• Width</li> <li>• Height</li> </ul>	<p style="text-align: right;">91 mm 115 mm 28 mm</p>
Net weight	approx. 150 g
Ambient conditions, operation <ul style="list-style-type: none"> <li>• Temperature</li> <li>• Air pressure</li> <li>• Humidity</li> </ul>	+10 °C to +40 °C (50 °F to 104 °F) 700 hPa - 1060 hPa 30 % - 80 %, no condensation
Ambient conditions, storage <ul style="list-style-type: none"> <li>• Temperature</li> <li>• Air pressure</li> <li>• Humidity</li> </ul>	-10 °C to +55 °C (14 °F to 131 °F) 700 hPa - 1060 hPa 15 % - 95 %, no condensation
Ambient conditions, transport <ul style="list-style-type: none"> <li>• Temperature</li> <li>• Air pressure</li> <li>• Humidity</li> </ul>	-10 °C to +55 °C (14 °F to 131 °F) 700 hPa - 1060 hPa 15 % - 95 %, no condensation
Setup location, maximum altitude above mean sea level	3000 m
Power supply <ul style="list-style-type: none"> <li>• Type</li> <li>• Power supply</li> <li>• Maximum current consumption</li> <li>• Supply voltage</li> <li>• Power supply frequency</li> </ul>	External power supply unit 12 V = 500 mA 100 V ~ - 240 V ~ 50 Hz - 60 Hz
Power consumption	< 6 W
Medical device in accordance with Directive 93/42/EEC	Class I with measuring function
EN 60601-1: Insulated device, protection class:	I
EN 60601-1: Electrical medical device, Type B	
Type of protection	IP20
Duty cycle	Continuous duty
Storage capacity (number of data records)	at least 10.000
Interfaces	1 x USB 2.0 (max. 500 mA) Ethernet (10/100 Base-T) WiFi

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## 13. COMPATIBLE SECA MEASURING DEVICES

The system **seca connect 103/seca 452** interface module currently supports the seca measuring devices specified in the table. Support of additional seca measuring devices is in preparation. Current information can be found at [www.seca.com](http://www.seca.com).

The system has limited backwards compatibility with older device generations. For a quick check whether your seca measuring device is compatible, compare the keyboard design (for example, the Start key) of your device with the figures in the table.

Device	Quick check		From serial number	Connection to <b>seca connect 103</b>			
							
Baby scales: <b>seca 336 i</b> <b>seca 333 i</b>			No limitation	Internal interface module			
Baby scales: <b>seca757</b> <b>seca727</b>			<b>seca 360° wireless:</b> 10000000034256 10000000034243	<b>seca 452</b> interface module			
Measuring stations: <b>seca 285/seca 284</b> <b>seca 287/seca 286</b>		-	No limitation	<b>seca 452</b> interface module			
Multi-functional scales: <b>seca 635</b> <b>seca 634</b>			<b>seca 360° wireless:</b> 10000000026211 10000000027487	<b>seca 452</b> interface module			
<b>seca 645</b> <b>seca 644</b>			10000000027015 10000000027016				
<b>seca 657</b> <b>seca 656</b>			10000000021683 10000000026289				
<b>seca 665</b> <b>seca 664</b>			10000000022821 10000000027014				
<b>seca 677</b> <b>seca 676</b>			10000000020483 10000000024369				
<b>seca 675</b> <b>seca 674</b>			10000000026776 10000000023806				
<b>seca 685</b> <b>seca 684</b>			10000000017288 10000000017495				
Column scale: <b>seca 704</b> <b>seca 703<sup>a</sup></b>						<b>seca 360° wireless:</b> 5704209100721 5703209102764	<b>seca 452</b> interface module

a. Retrofitting of **seca 452** exclusively through authorized service technicians

## 14. OPTIONAL ACCESSORIES AND SPARE PARTS

Optional accessories and spare parts	Article number
Scanner (medical device): <ul style="list-style-type: none"> <li>• Honeywell Xenon 1900H (2D)</li> <li>• Datalogic Gryphon I (GD4430 HC (2D)</li> </ul>	Cannot be ordered through seca

## 15. DISPOSAL

→ [Devices](#)

→ [Batteries/rechargeable batteries](#)

### 15.1 Devices



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](mailto:service@seca.com)**

### 15.2 Batteries/rechargeable batteries



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.

## 16. WARRANTY

→ [Software](#)

→ [Device](#)

### 16.1 Software

Please note that this software is subject to warranty restrictions which may arise in conjunction with the license, for example. The warranty restrictions can be called up at [www.seca.com](http://www.seca.com).

### 16.2 Device

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.

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## 17. DECLARATIONS OF CONFORMITY

→ For Europe

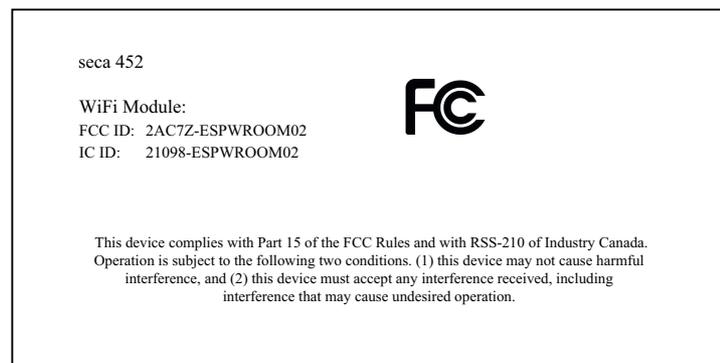
→ For USA and Canada

### 17.1 For Europe



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](http://www.seca.com).

### 17.2 For USA and Canada



#### NOTE

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

#### NOTE

Changes or modifications made to this equipment not expressly approved by seca may void the FCC authorization to operate this equipment.

#### NOTE

Radiofrequency radiation exposure Information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 1 m between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# 18.ANNEX: QUICK REFERENCE: MEASUREMENT PROCEDURE

Quick reference: Measuring procedure for network integrated seca devices



--

<b>Device identification</b>	
Device name:	
Device type:	
Device location:	
Server address (seca connect 103):	
Port:	

<b>Device settings</b>	
<b>Identification mode</b>	
<input type="checkbox"/>	OFF
<input type="checkbox"/>	Manual (no bar codes)
<input type="checkbox"/>	Scan Patient ID
<input type="checkbox"/>	Scan Patient ID and User ID

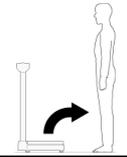
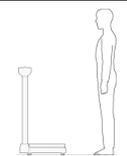
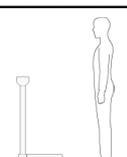
<b>Confirm measurement at device</b>	
<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

**Use these features as indicated only:**  
**Notice:** Failure to use these features as indicated below will result in invalid values being transferred to the EMR.

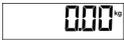
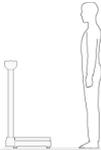
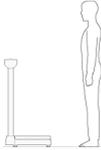
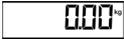
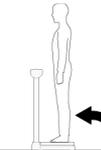
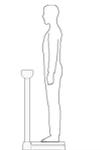
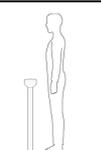
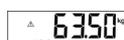
Applicable to this device?	Feature	Use this feature?
<input type="checkbox"/>	<b>hold</b> key	Do not use!
<input type="checkbox"/>	<b>bmi</b> key	Do not use!
<input type="checkbox"/>	<b>send/print</b> *	Do not use!
<input type="checkbox"/>	<b>tare</b>	Deactivate feature after each measurement to clear <b>tare</b> value from memory
<input type="checkbox"/>	<b>2 in 1</b>	<ul style="list-style-type: none"> <li>Deactivate ultrasound length measurement feature (e.g. in models <b>seca 287/286</b>) before measurement</li> <li>Deactivate <b>2 in 1</b> feature after each measurement to clear value from memory</li> </ul>
<input type="checkbox"/>	<b>clear</b> key	Press key <b>before</b> each measurement to clear obsolete length value from memory
<input type="checkbox"/>	<b>BMIF</b>	Deactivate feature before confirming measurement

\* Exception: Use **send** button on head slide of seca 285/284 as usual.

**What to do if....**

Integration module	Device	Patient	User
 Workflow LEDs solid red			Data transmission error <ul style="list-style-type: none"> <li>Ask patient to step off device.</li> <li>Wait till workflow LEDs go out.</li> <li>Go through COMPLETE measuring procedure.</li> </ul>
 Network LED flashing green			Establishing network connection. <ul style="list-style-type: none"> <li>Wait till network LED ist solid green.</li> <li>Then start measuring procedure.</li> </ul>
 Network or Power LED flashing or solid red			Malfunction, contact administrator.

**Measuring procedure**

Integration module	Device	Patient	User
 Network or Power LED solid green	 0.00 <sup>kg</sup>		<ul style="list-style-type: none"> <li>• Make sure device is switched on.</li> <li>• Make sure power and network LEDs are solid green.</li> </ul>
 Workflow LEDs solid green			Enter ID(s) as stated in "Device settings".
 Network or Power LED solid green	 0.00 <sup>kg</sup>		Ask patient to step on device.
 Workflow LEDs solid green	 63.50 <sup>kg</sup>		Wait till display shows result permanently.
 Workflow LEDs flashing green			Scan "confirm" bar code if device is set accordingly (see "Device settings").
 Workflow LEDs solid green for approx. 5 seconds	 63.50 <sup>kg</sup>		<ul style="list-style-type: none"> <li>• Wait till workflow LED is solid green.</li> <li>• Ask patient to step off device.</li> </ul>
 Network or Power LED solid green	 63.50 <sup>kg</sup>		<ul style="list-style-type: none"> <li>• Wait till workflow LED goes out.</li> <li>• Measurement result remains in display.</li> <li>• Device is ready for new measurement procedure.</li> </ul>
<p><b>NOTE</b> If result seems implausible go through COMPLETE measuring procedure again.</p>			

# FOR SERVICE TECHNICIANS: SERVICING AND REPAIRING THE SYSTEM

→ [Retrofitting seca 703 column scale](#) → [For administrators: Setting up and operating the system](#)

## 1. ABOUT THIS DOCUMENT

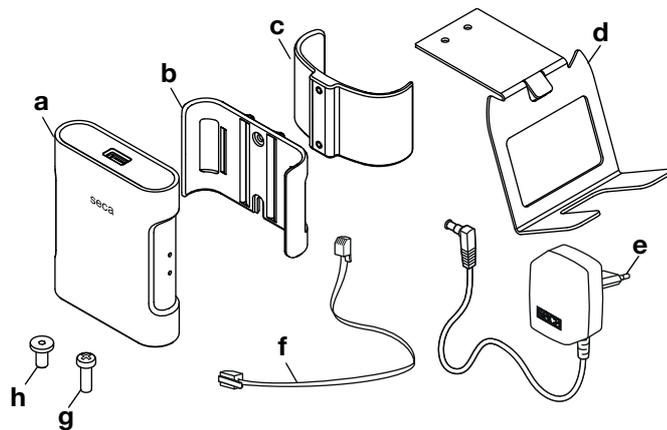
### NOTE

- The topics described in this part of the user documentation are exclusively intended for seca trained service technicians.
- Observe the information for administrators → [For administrators: Setting up and operating the system](#).

## 2. RETROFITTING SECA 703 COLUMN SCALE

- [Preparing the scale](#)
- [Installing the seca 452 interface module](#)
- [Installing the scanner bracket](#)
- [Connecting a seca 452 interface module](#)
- [Performing final work](#)

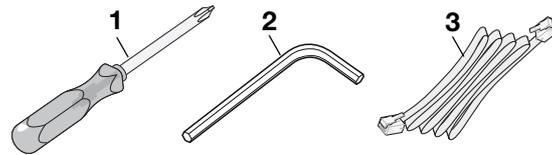
You need the following parts from set no. 4520050009:



Pos.	Component	Pcs.
<b>a</b>	seca 452 interface module	1
<b>b</b>	Bracket	1
<b>c</b>	Column bracket	1
<b>d</b>	Scanner bracket	1
<b>e</b>	Power supply unit	1
<b>f</b>	Connecting cable, short	1
<b>g</b>	Cross-head screw	2
<b>h</b>	Hex head socket screw	2

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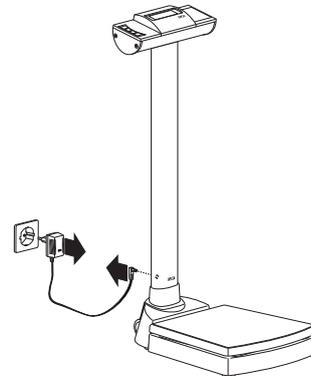
Depending on the installation and connection version, you may need the following tools (not included in the scope of delivery):



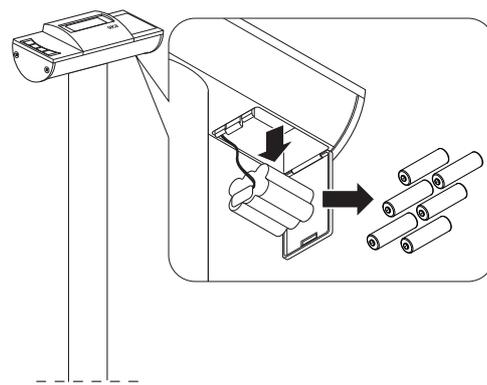
Pos.	Component	Size
1	Cross-head screwdriver	PH 1
2	Hex socket wrench	4.0
3	Ethernet cable	n/a

## 2.1 Preparing the scale

1. Switch off the scale.
2. Disconnect the power supply unit from the power supply socket.
3. Pull the power cable out of the scale.



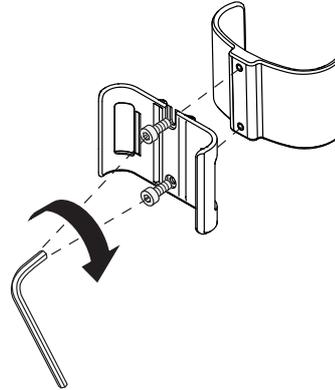
4. Remove the batteries:
  - a) Press the latch of the battery compartment
  - b) Open the lid of the battery compartment
  - c) Remove batteries from the battery holder
  - d) Put battery holder back and close lid again



5. Store the power supply unit and the batteries or dispose of them properly (→ [Disposal](#)).

## 2.2 Installing the seca 452 interface module

1. Screw the bracket to the column bracket with two hex head socket screws.

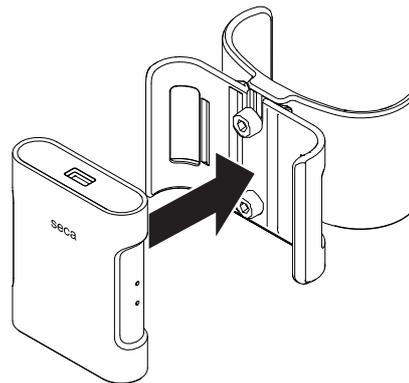


2. Press the column bracket onto the column at the height of the power supply connection.

### NOTE

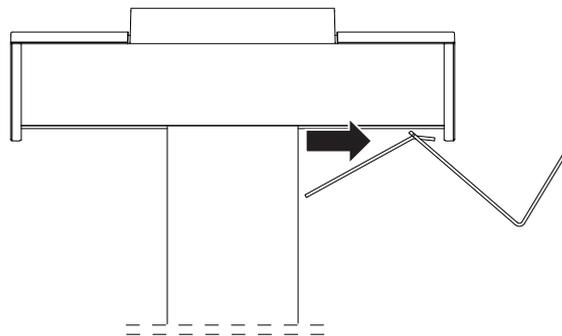
The power supply connection is no longer needed, the column bracket can completely cover the power supply connection.

3. Press the **seca 452** interface module into the bracket.

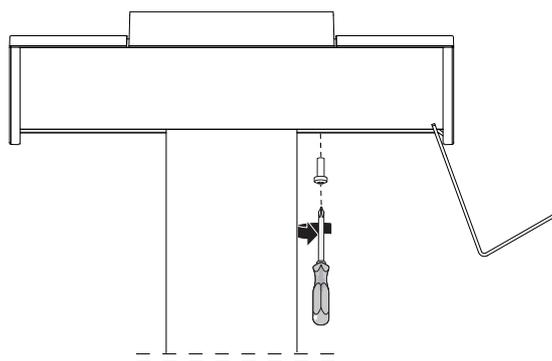


## 2.3 Installing the scanner bracket

1. Attach the scanner bracket to the desired side part of the display housing.



2. Screw the scanner bracket to the bottom of the display housing with two cross-head screws.

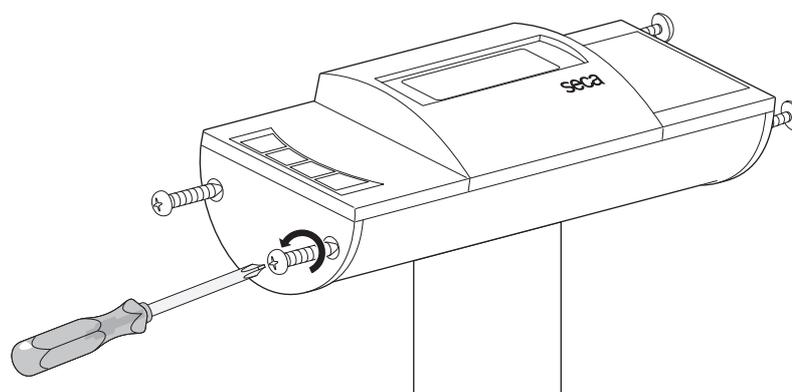


## 2.4 Connecting a seca 452 interface module

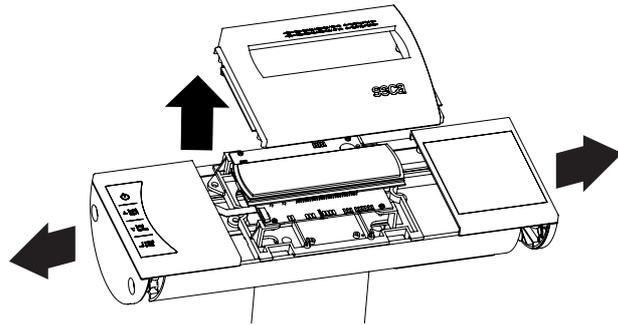
1. Remove the display housing of the scale:
  - a) Remove seca quality seal on side cap



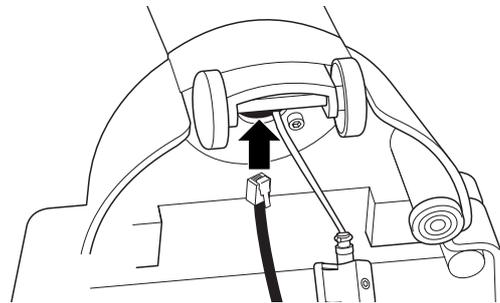
- b) Loosen screws on both side caps



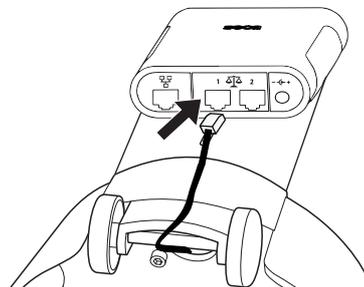
- c) Push right and left operating housing outward somewhat
- d) Remove display housing



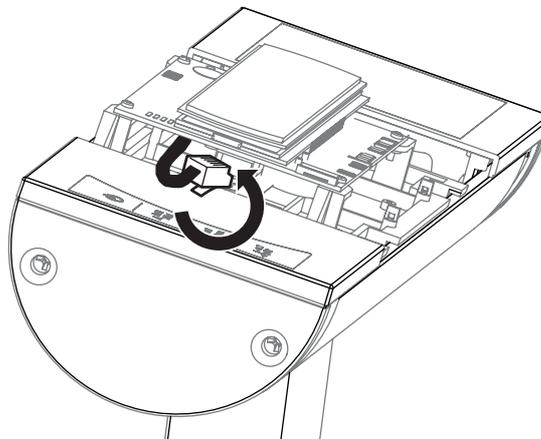
- 2. Connect the scale to the **seca 452** interface module:
  - a) Carefully tilt scale so that the bottom of the scale is accessible
  - b) Thread connecting cable from below into the column and push upward



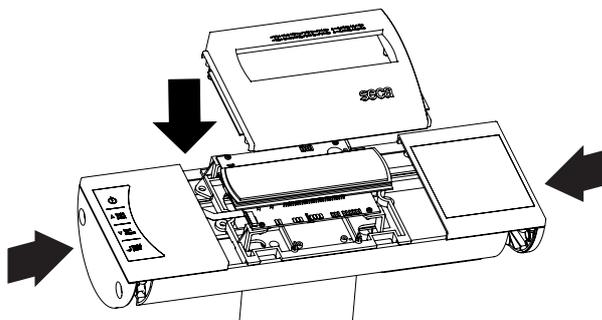
- c) Connect the lower end of the connecting cable to interface 1 of the **seca 452** interface module



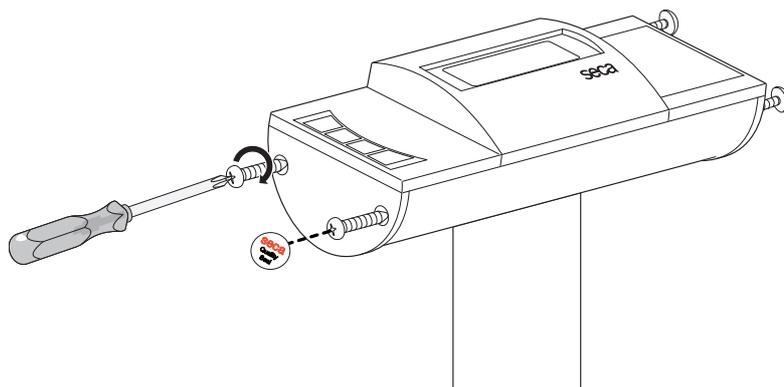
- d) Position the scale upright
- e) Pull the connecting cable out under the display and insert into the display electronics



3. Install the display housing of the scale:
- a) Put on display housing
  - b) Push the right and left operating house inward



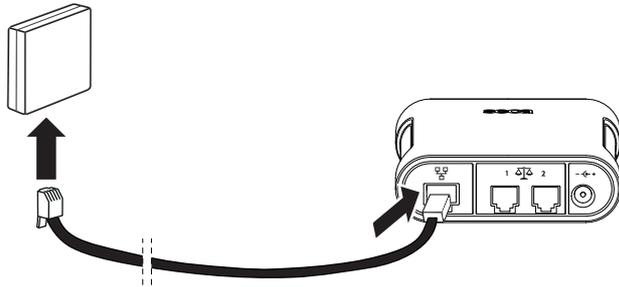
- c) Tighten screws on side caps
- d) Renew seca quality seal



You have the following options to continue:

- ▶ For communication via Ethernet, continue with step 4.
- ▶ For communication over WiFi, continue with step 5.

4. Connect an Ethernet cable to the **seca 452** interface module:
  - a) Connect the Ethernet cable to the Ethernet interface of the **seca 452** interface module
  - b) Connect the Ethernet cable to the network socket



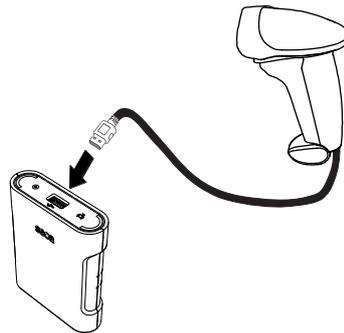
**NOTICE!**

**Malfunction caused by an incompatible scanner**

Incompatible scanners can lead to faulty data transmission or system malfunction.

- ▶ Only use scanners that are listed in the section → [Optional accessories and spare parts](#).

5. Connect a scanner to the **seca 452** interface module:
  - a) Connect the scanner cable to the USB interface of the **seca 452** interface module
  - b) Attach the scanner to the scanner bracket

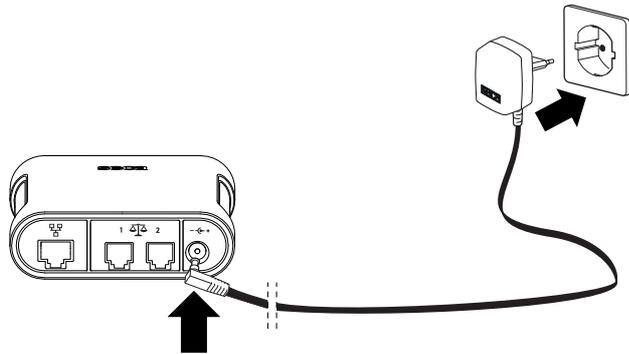


**NOTICE!****Damage to device due to incorrect power supply unit**

The power supply unit of the scale is not suitable for operation with the **seca 452** interface module.

► Only use the power supply unit included in set 4520050009.

6. Connect the power supply unit to the **seca 452** interface module:
  - a) Connect the power cable to the power supply connection of the **seca 452** interface module
  - b) Insert the power supply unit into a power supply socket



7. Perform the necessary final work → [Performing final work](#).

# Medical Measuring Systems and Scales since 1840

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

seca operates worldwide with headquarters  
in Germany and branches in:

**seca** france  
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