## Software and settings

KORROSTOP4.0® offers extensive options and features. Only the most essential elements for daily operation are described here. Further information can be found at **https://github.com/easymetal/Korrostop4.0-EN/wiki**.

KORROSTOP4.0® can be used as delivered.

When it is delivered, only one user is created. This user's name is **„korro"** and the password is **„stop"**.
Please change the login credentials after commissioning.

Navigation and the most important screens
You can switch between the individual screens via **K5 touch screen** or **K7 rotary encoder**.
Press the arrows ◄ or ► on the screen or turn the rotary encoder.
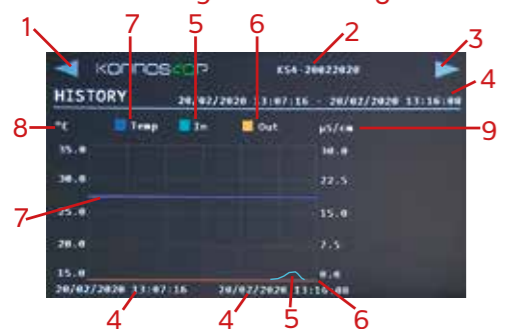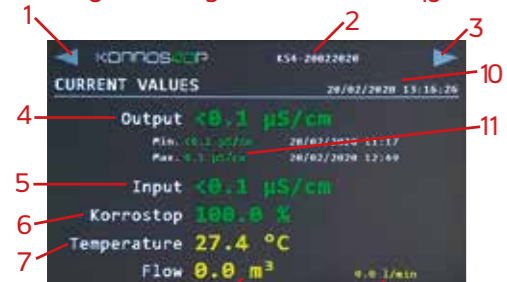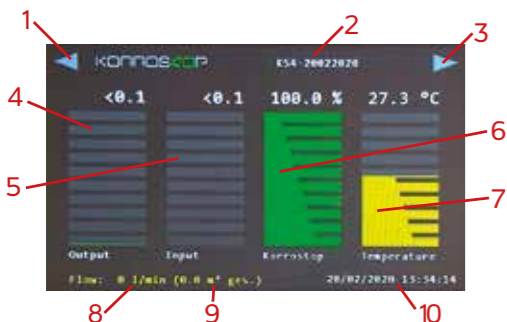
Analog and digital measured value display
Color display (traffic light system) of the measured values.

1 - Previous screen
2 - Device name (serial number based, can be changed at any time)
3 - Next screen
4 - Output conductance in µSiemens/cm
5 - Input conductance in µSiemens/cm
6 - Water quality produced by the E.KO IONISER® in percent
7 - Water temperature in the E.KO IONISER® (for 1501 the outgoing, for 1502 and 1503 the incoming water temperature)
8 - Water flow rate in L/min. Values are only displayed correctly when water is running!
9 - Total water that has flowed through the E.KO IONISER®
10 - Current date / current time
11 - Minimum and maximum values of the output conductance. Date and time of the min./max. measured values.
Minimum and maximum values of the output conductance. Date and time of the min./max. measured values.

History
Chronological sequence of conductance (input/output) and water temperature.

1 - Previous screen
2 - Device name (serial number based, can be changed at any time)
3 - Next screen
4 - Start and end date/time of the progress display
5 - Conductance input
6 - Conductance output
7 - Water temperature
8 - Temperature scale
9 - Conductance scale

About
Overview of the most important facts and settings.

1 - Previous screen
2 - Device name (serial number based, can be changed at any time)
3 - Next screen
4 - Version number and serial number
5 - Status on various components
6 - Which E.KO IONISER® is being used. The standard setting is 1501 and must be changed manually for 1502/1503 on the „CONFIGURATION" screen in the „System" section. In the future, recognition will be performed automatically.
7 - Display of QR code or address for the connection with a browser.
8 - Further information on the respective network connection
9 - The logged-in user is displayed (or the user can be logged out here). The user does not need to be logged to use the device as a measuring device. This is only the case for changing settings and for extended functionalities.
10 - Relevant errors are displayed here (date, time and text)

https://www.easymetal.com

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Subject to technical modifications.

KORROS4.0P®
Quick Start Manual

We thank you for choosing the KORROSTOP4.0® measuring device.
KORROSTOP4.0® is a reliable, accurate measuring device for measuring conductance, temperature and flow of deionized water after treatment with the E.KO IONISER® system.
The use of KORROSTOP4.0® on other deionizing systems is not permitted. If KORROSTOP4.0® is operated illicitly in conjunction with third-party products (deionizing systems), license fees will be incurred as subsequently charged costs which are only covered in conjunction with the E.KO IONISER® 1501/1502/1503.
The E.KO IONISER® with KORROSTOP4.0® is compatible with all EDM machines (regardless of manufacturer) and, with its many communication channels, offers full integration into your existing corporate IT system.

KORROSTOP4.0® can be connected to the following E.KO IONISER® systems:

E.KO IONISER® 1501: Cover color yellow. Application: EDM - Standard applications
E.KO IONISER® 1502: Cover color gray. Application: EDM - Carbide
E.KO IONISER® 1503: Cover color white. Application: Ultrapure water, process water, boiler feed water

The scope of delivery includes:

KORROSTOP4.0® Measuring Kit

M1 - Measuring device KORROSTOP4.0®
M2 - Plug-in power supply unit
M3 - USB stick documentation and notes (in storage compartment K11)

CONNECT4 Connection Kit

C1 - LT coupling ½" ET black
C2 – LT plug ½" ET black
C3 – LT coupling ½" grey for flushing (see E.KO IONISER® manual)
C4 – LT plug ½" grey for flushing (see E.KO IONISER® manual)
C5 – Angle 90° ½" IT x ½" ET (operation without KORROSTOP4.0®)
C6 – Reducing ring ET x IT 1" x ½" (operation without KORROSTOP4.0®)
C7 – Stepped grommet 3-step 1" x 25/20/13 2 pcs
C8 – Union nut for stepped grommet 2 pcs.
C9 – Hose clamp ¾" 2 pcs. (to be used depending on hose thickness)
C10 – Hose clamp ½" 2 pcs. (to be used depending on hose thickness)
C11 – Flat gasket 1" white 4 pcs. 2 assembly, 2 reserve

Configuration of KORROSTOP4.0®

KORROSTOP4.0® provides a variety of configuration settings. You can select and (de)activate features and enter configuration data using virtual keyboards. You can find a comprehensive and continuously updated description on our Wiki pages at:
https://github.com/easymetal/Korrostop4.0-EN/wiki.

The software is regularly adapted and enhanced. Updates can be obtained via the Internet or an SD card.

How do you find out about a new update?
• You can check this yourself via KORROSTOP4.0®.
• A sticker when you exchange an E.KO IONISER® indicates a new update.
• On the easymetal website at **https://www.easymetal.com** and at **https://github.com/easymetal/Korrostop4.0-EN**.
• Of course, your dealer will also be informed about new updates.
We strongly recommend that you always install the latest updates.

Assembly of KORROSTOP4.0®

Note the different positions of the connections C1, C2 and the hose guides K1, K2 for E.KO IONISER® 1501 and E.KO IONISER® 1502/1503.
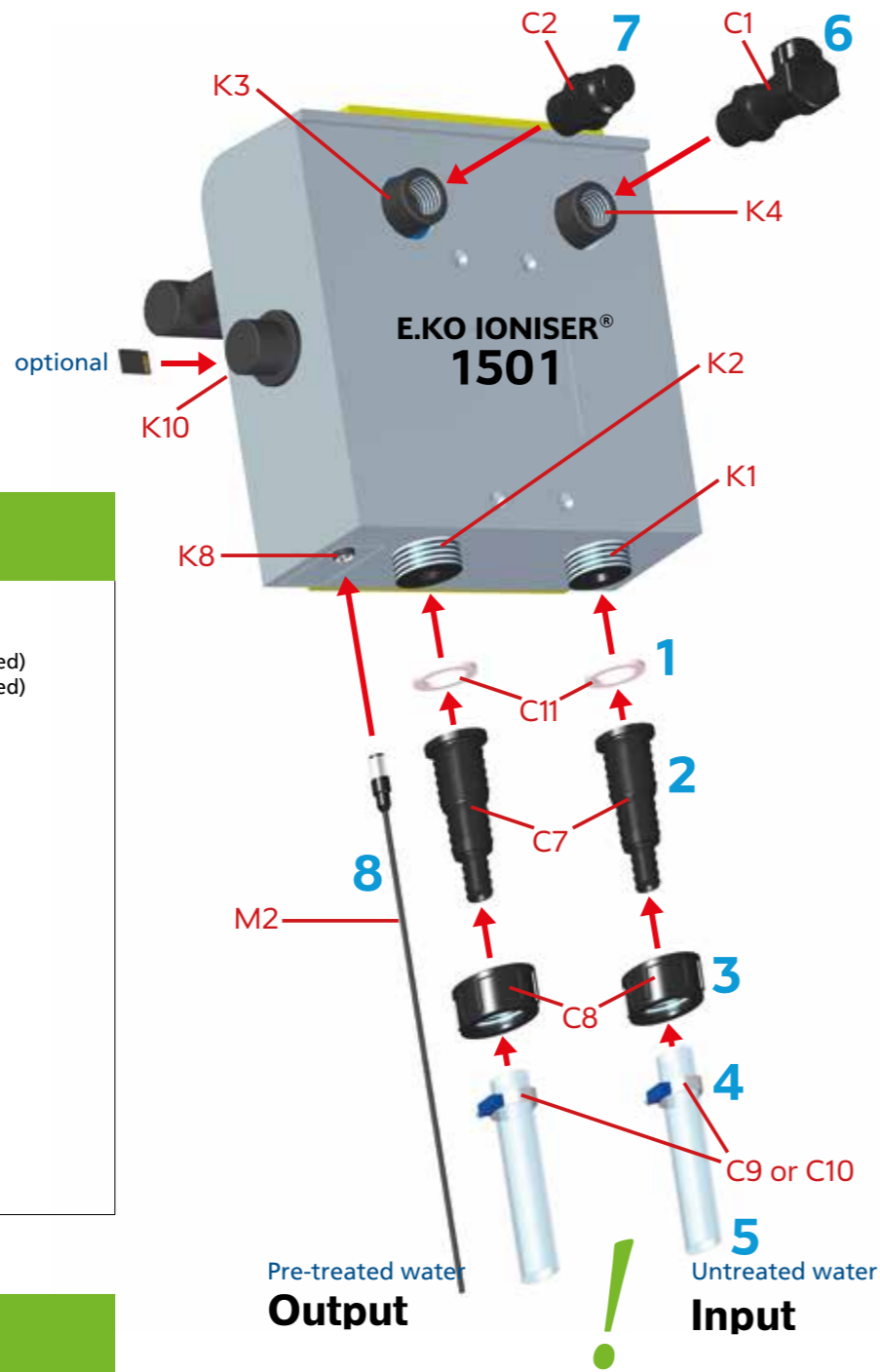
E.KO IONISER® 1501

E.KO IONISER® 1502/1503

Setting 1502/1503

Screen: CONFIGURATION
Range: System

Pre-treated water **Output**

Untreated water **Input**

Structure of KORROSTOP4.0®

- K1 - Water connection 1
- K2 - Water connection 2
- K3 - ½" connection 1 including sealing ring (factory fitted)
- K4 - ½" connection 2 including sealing ring (factory fitted)
- K5 - Touch screen
- K6 - Handle
- K6.1 - Touch pen
- K7 - Rotary encoder
- K8 - Power connection
- K9 - Cover for extension plug
- K9.1 - Operation display
- K9.2 - Connection for extensions and automation PLC
- K9.3 - Network connector
- K9.4 - USB connection
- K9.5 - USB transfer indicator 1 (top - send)
- K9.6 - USB transfer indicator 2 (below - received)
- K10 - Cover for extended operating elements
- K10.1 - SD-card slot
- K10.2 - Reset button
- K10.3 - Button for service personnel
- K10.4 - Light emitting diode 1
- K10.5 - Light emitting diode 2
- K11 - Cover for storage compartment
- K11.1 - USB stick see M3 (documentation and notes)

Physical specifications*

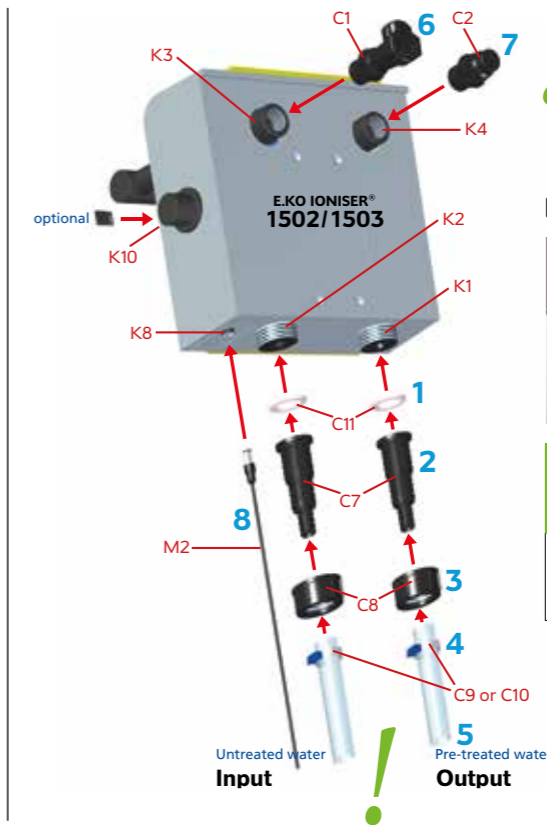| Dimensions (L/W/H) **	125x235x212 mm
Material	ABS, glass fiber reinforced ***
Storage temperature	5°C to 70°C
Operating temperature	5°C to 50°C
Air humidity ****	10% to 90% relative air humidity
Max. measurable flow	0 L/min to 25 L/min
Max. water pressure	6 bar (Todo easymetal)

* Please note that the limiting factors are not defined by KORROSTOP4.0® but by your EDM machine and the E.KO IONISER® or its operating parameters!
** without connections
*** various state-of-the-art materials were used for connections
**** Storage and operation

Pre-treated water **Output**

Untreated water **Input**

KORROSTOP4.0® Wiki
https://github.com/easymetal/Korrostop4.0-EN/wiki

Github KORROSTOP4.0®
https://github.com/easymetal/Korrostop4.0-EN

Press

Removal of Korrostop4.0

To disconnect KORROSTOP4.0® from the E.KO IONISER®, press the two EASY quick couplings and simultaneously pull the **M1 measuring device KORROSTOP4.0®** away from the E.KO IONISER®.
Never remove the two **C7 3-stage step grommets** before the EASY quick-disconnect couplings have been opened and the **M1 measuring device KORROSTOP4.0®** has been removed. (Water leakage due to flow)

Note

- The KORROSTOP4.0® measuring device is designed exclusively for operation in conjunction with an E.KO IONISER®. The operation of KORROSTOP4.0® with other deionizing systems is not permissible. Operating the KORROSTOP4.0® measuring device in conjunction with other products (deionizing systems) will render the warranty void.
- Observe all regulations and internal company rules when handling water and electricity!
- Water and power connections must always be made by professionals.
- All connections must be checked for leaks before operation. Pay particular attention to the seating of the sealing rings of **K3 - 1/2" connection 1** and **K4 - 1/2" connection 2**.
- Network connections must be carried out by IT professionals to ensure the integrity of the network.
- Make sure that the measuring device is always dry.
- The socket for the **M2 power supply unit** must be installed so that no water comes into contact with the socket in the event of water leakage.
- Only the **M2 power supply unit** supplied with the measuring device may be used. Other makes do not work.
- If the housing of the **M1 KORROSTOP4.0®** measuring device is opened by untrained personnel, the warranty shall be rendered void.
- Network cable, USB cable and SD card are not included in the delivery.
- The **M3 USB stick**, as well as USB sticks in general, are not meant to be plugged into the **M1 KORROSTOP4.0® measuring device**. This can lead to unexpected errors.
- Route the cable from the **M2 power supply unit** and all hoses to the **KORROSTOP4.0® M1 measuring device** so that employees do not trip over them. The cable must not be installed together with other cables carrying live voltage.
- If you notice any malfunctions (e.g. water leakage, mechanical defects in the housing, etc.) do not continue to use KORROSTOP4.0® under any circumstances. You can continue to operate your machine with the components of the Connect connection kit until the KORROSTOP4.0® has been replaced.

Possible faults and causes

- **K5 touch screen** remains black: Check if the **K9.1 - operating display** is lit. If not, the measuring device has no current. Possible causes: The power outlet does not carry current (the voltage may not be within specification) or the **M2 power supply unit** is defective. If neither is the case, the measuring device is defective and must be replaced. Other possible causes: The **M2 power supply unit** of the **M1 KORROSTOP4.0® measuring device** was not plugged in properly. Insert the plug fully into the ‚socket'.
- Water leakage from **K1 water connection 1** or **K2 water connection 2**: the seal is not properly fitted or it is missing. The screw connection was not tightened firmly enough.
- Water leakage from **K3 - 1/2" connection 1** or **K4 - 1/2" connection 2**: the seal is not fitted properly or it is missing. The screw connection was not tightened firmly enough.
Screw joints should not be tightened with water pump pliers!