

JT-UM25C

USB-Messgerät



1. GENERAL INFORMATION

Dear customer,

Thank you for purchasing our product. In the following are information which you should note before commissioning. Whenever you have unforeseeable problems do not hesitate to contact us.

Today, USB connections are not only found at PCs, but also at power banks, in cars or in trains. But not all connections are of best quality and deliver even currents and voltages.

With the JT-UM25C, you always have all values in view. The meter supports additional functions such as Quickcharge 2.0 and 3.0, as well as Apple 2.4 A, 2.1 A, 1 A, 0.5 A and Android DCP, and also offers convenient evaluation via a wireless interface. With a measuring range of up to 24 V and 5 A, the JT-UM25C is suitable for practically all applications. The integrated 1.44" LCD display can be regulated in five brightness levels and provides always an overview of all measured values.

2. DEVICE OVERVIEW

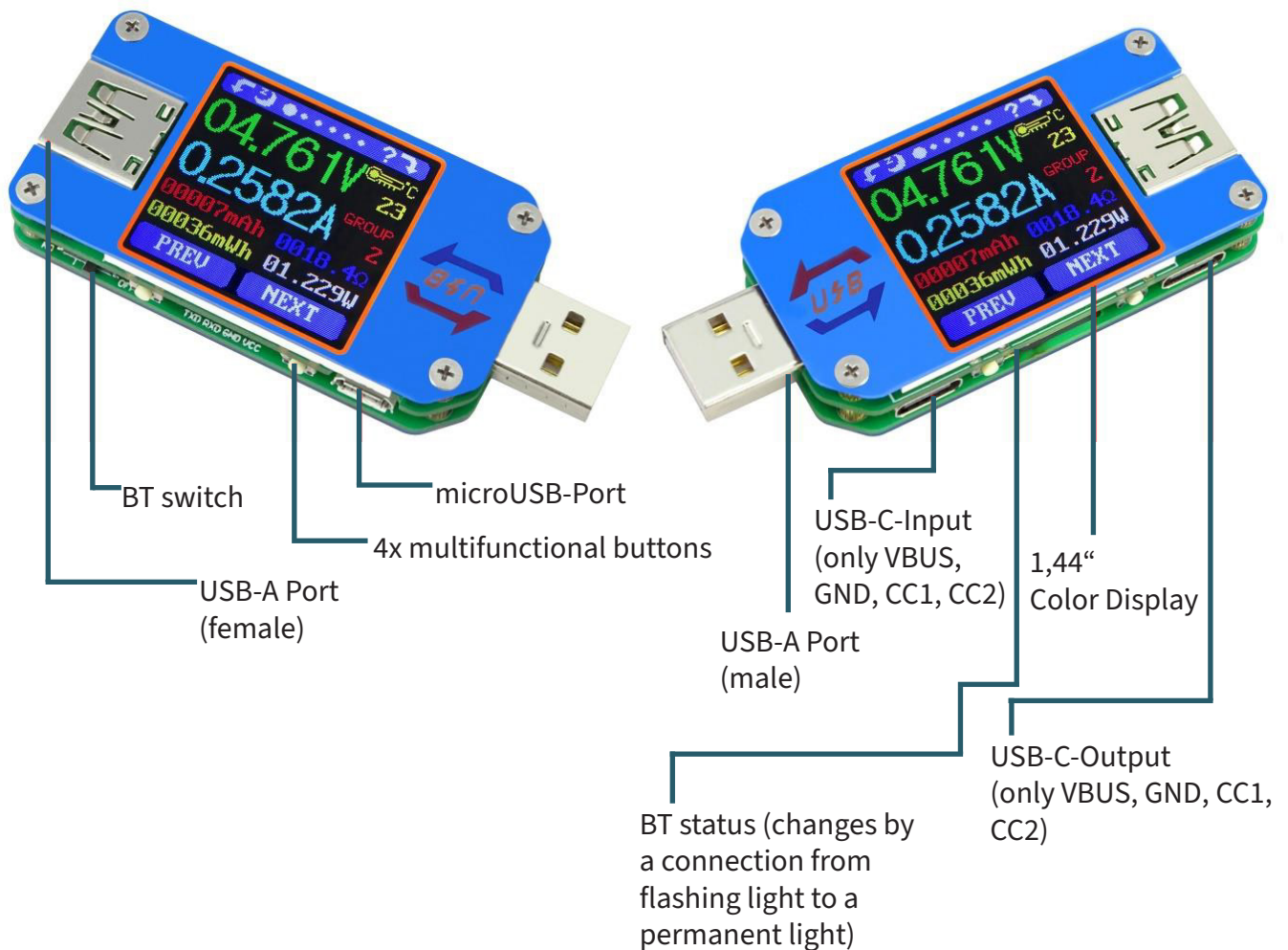
Voltage measuring range	4 - 24 V
Current measuring range	0 - 5 A

Update rate	2 Hz
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Measurement accuracy	0,001 V / 0,0001 A
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Temperature range	-10 - 100 °C
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Display size	1,44"
Supported QuickCharge modes	QC2.0, QC3.0, Apple 2.4 A / 2.1 A / 1 A / 0.5 A, Android DCP, Samsung



3. FUNCTION MENU AND NAVIGATION

General use



Measurement result main page



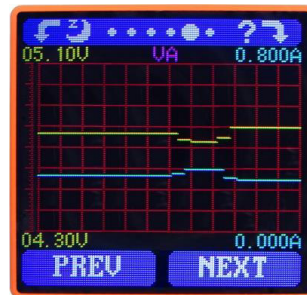
QuickCharge detection



Recording of charging process



Cable impedance



Measurement graph



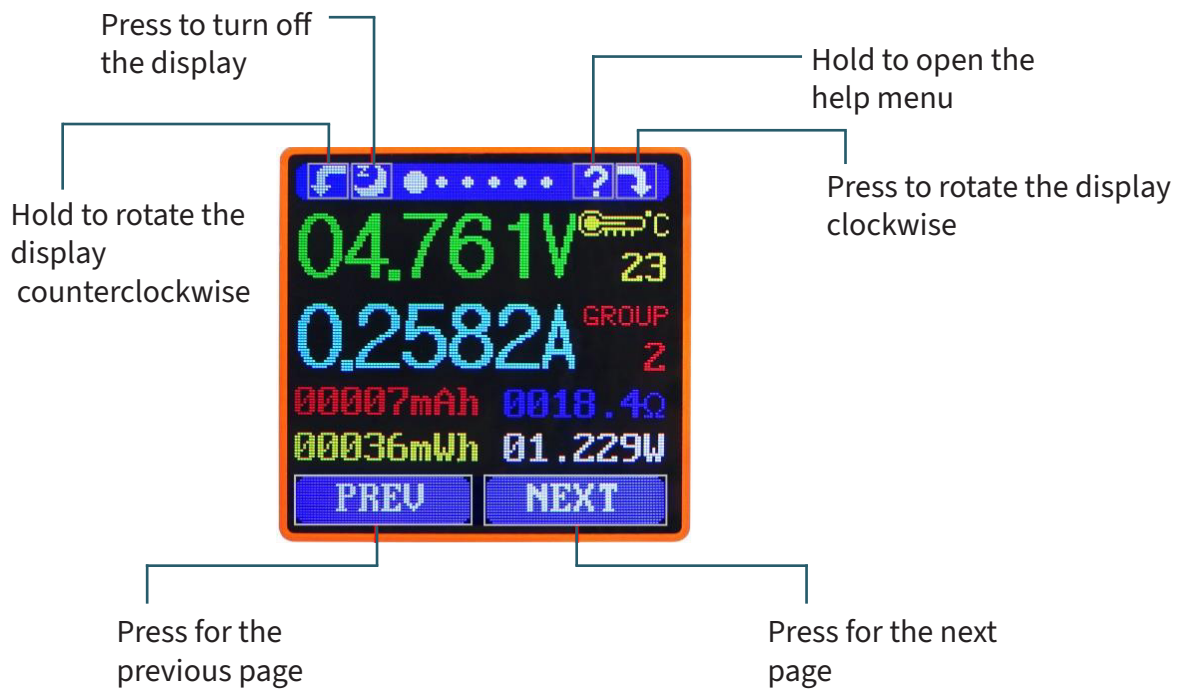
System settings

Use **PREV** and **NEXT** to switch between the separate menu pages.

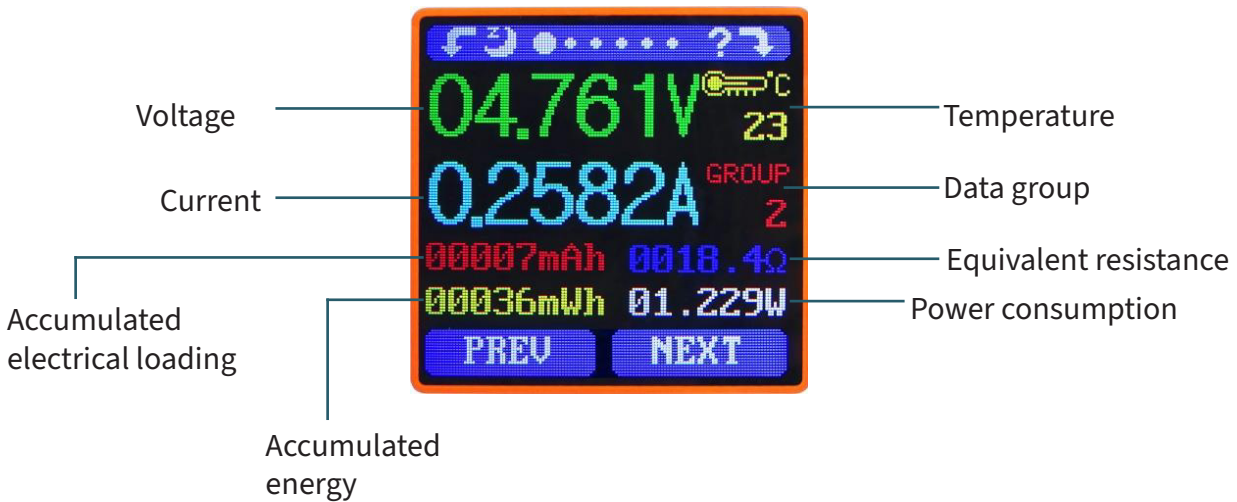
Hold **PREV** to switch to the next data group. Hold **NEXT** to reset the current data group.

Language settings

To change the default language of your device, you must first disconnect your device from the power source. Now press and hold any multifunction button and reconnect the device. Keep the key pressed until your desired language is selected on the display.



Main menu (measurement results)



The values of the data group 1 - 9 will be saved by a voltage interruption of the measuring device and is recalled and continues after the device is switched on again.

The values of data group 0, however, will be showed after the restart flashing and then it will be reset to 0 when 1mAh has been reached.

QuickCharge detection

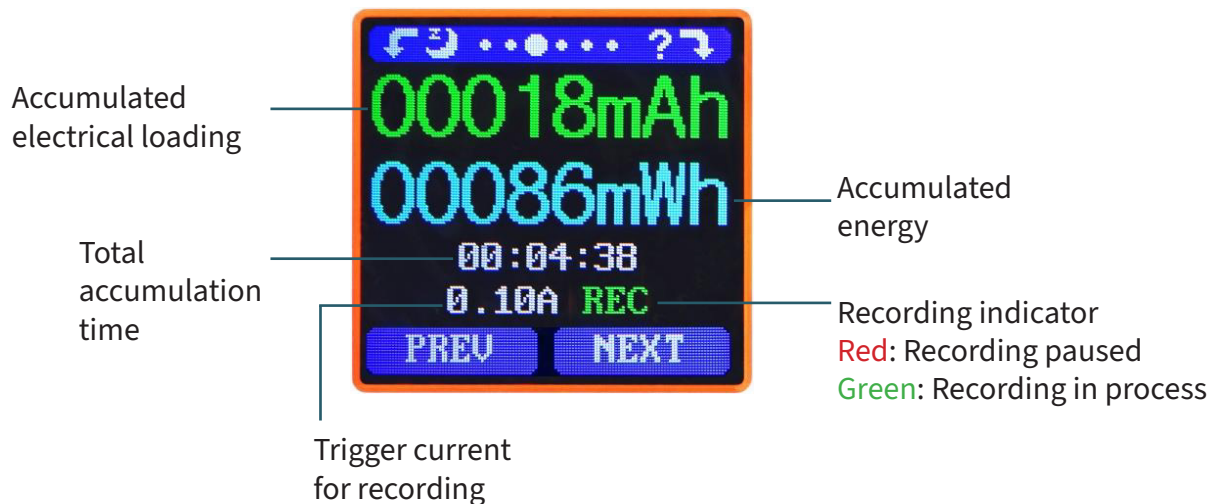


The meter automatically recognizes devices with QuickCharge support.

The following QuickCharge modes are currently supported:

QC2.0, QC3.0, Apple 2.4 A / 2.1 A / 1 A / 0.5 A, Android DCP, Samsung

Recording of charging process



After power is turned on, if the flowing current is greater than the trigger value, the system automatically starts recording the accumulated electrical charge, energy and elapsed time. The „REC“ indicator then changes from red to green.

To set the current trigger value, press **NEXT** and hold it to highlight the value. Press **PREV** to adjust the value accordingly. The value can be set anywhere between 0.01 A and 0.3 A.

Cable impedance

UM25C directly at the power supply system:
Voltage and current values are displayed

UM25C via data connection:
Voltage and current values are displayed



Resistance of the data connection cable

Measurement procedure:

First, connect the measuring device directly to the source and set the corresponding current load (recommended value: 1 A). Press **NEXT** and hold the button to start data recording.

Now, disconnect the meter and then connect it to the power source via a microUSB or type-C data input connection and set the load current to the same value as in the first step. Press **NEXT** and hold the button to switch to the to begin data recording.

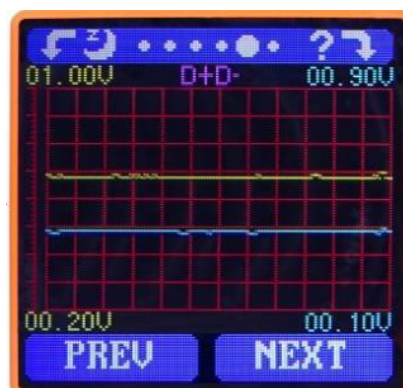
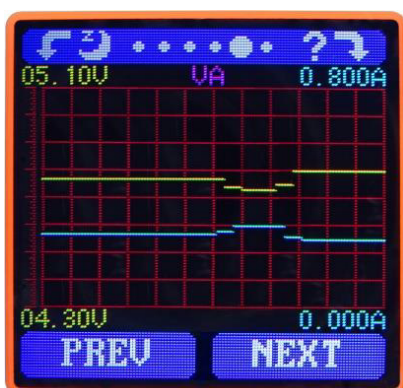
The display prompt stops flashing and the resistance measurement test of the data connection cable is completed and the value is displayed.



Attention! If the screen goes black in the second step, this means that the voltage difference is too high and the tester switches to the 4 V shutdown state. The load current must be reduced.

Then restart the measurement from the first step. After the resistance test of the data connection cable is completed, the tester must be switched off and on again to continue the measurement.

Measurement graph



This menu displays the voltage measurement over time in the range of 4 - 24 V, as well as the current measurement in the range of 0 - 5 A and automatically adjusts the displayed range in real time to account the voltage and current fluctuations.

Press **NEXT** and hold to switch D+ / D- graph. This interface displays the D+ / D- voltage measurement over time in the range of 0 - 3.3 V and automatically adjusts the displayed range in real time to account the D+ / D- voltage fluctuations.

System settings



Press and hold the button **NEXT** to enter the setting mode, press **NEXT** again to navigate through the options. Then press **PREV** to change a setting and press **PREV** again to cycle through the setting options. At each setting state, press and hold **NEXT** to exit the system settings.

4. PC - SOFTWARE

1. Connection

First download the software installation file [here](#).

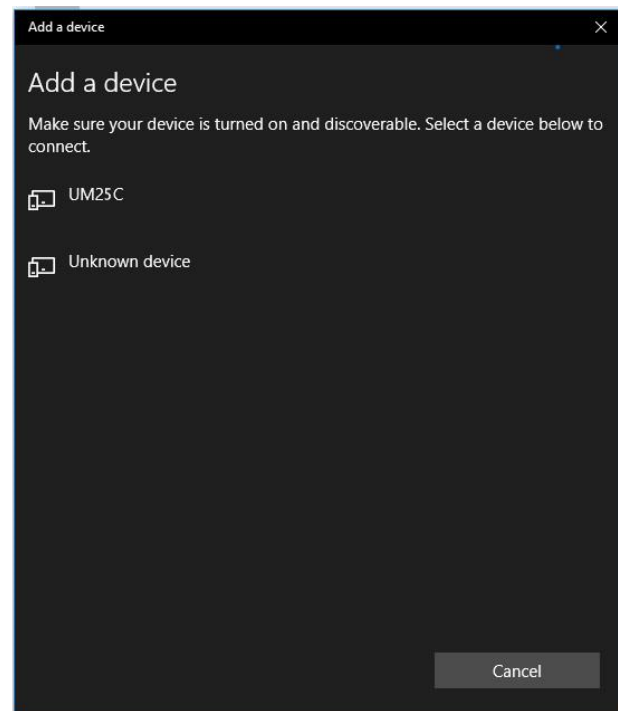
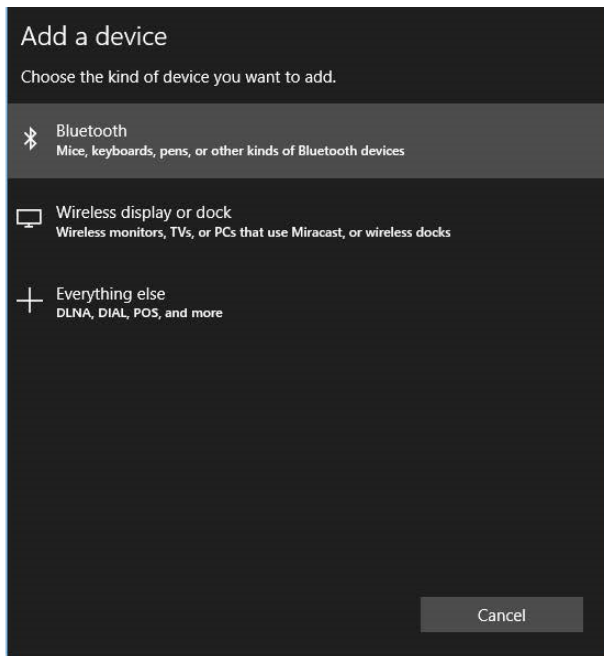
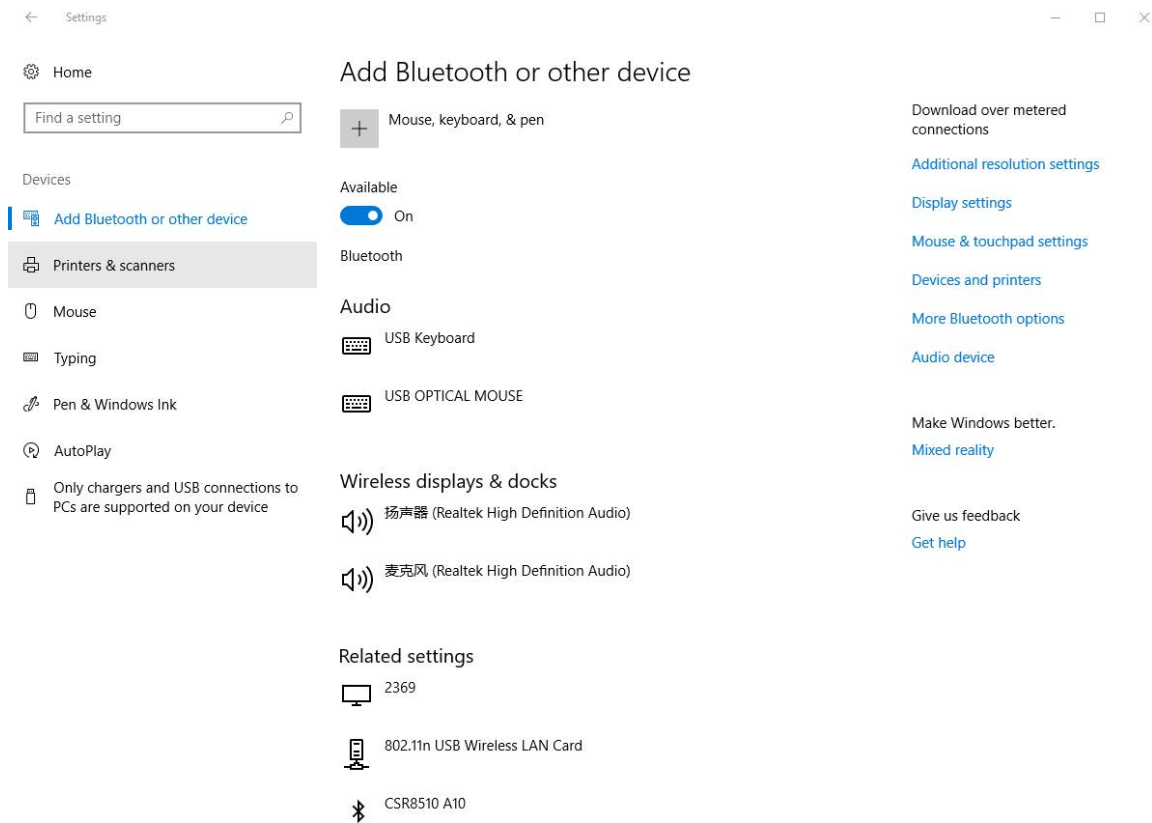
Additionally, you need the font package **Arial Unicode MS.ttf**, this is located in the same folder as the installation file. Please install the font package first, before you continue with the installation of the software.

Now, install the software and follow the instructions there during the installation process.

After the installation process is completed, activate first of all the BT function on the UM25C measuring device with the BT switch.

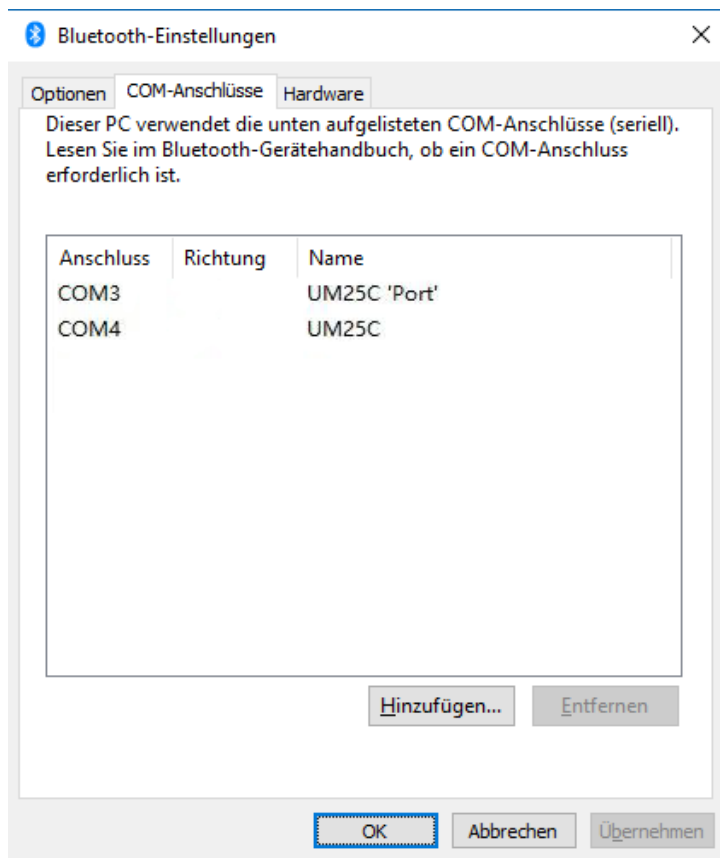
Then use the BT search in the settings of your computer to search for new BT devices. Add the **UM25C** device when it is found. If you are asked for a PIN during connection setup, please use the pin **1234** or **0000**.

The screenshots shown here are from Windows, trademarks like Bluetooth or Windows belong to their respective owners.



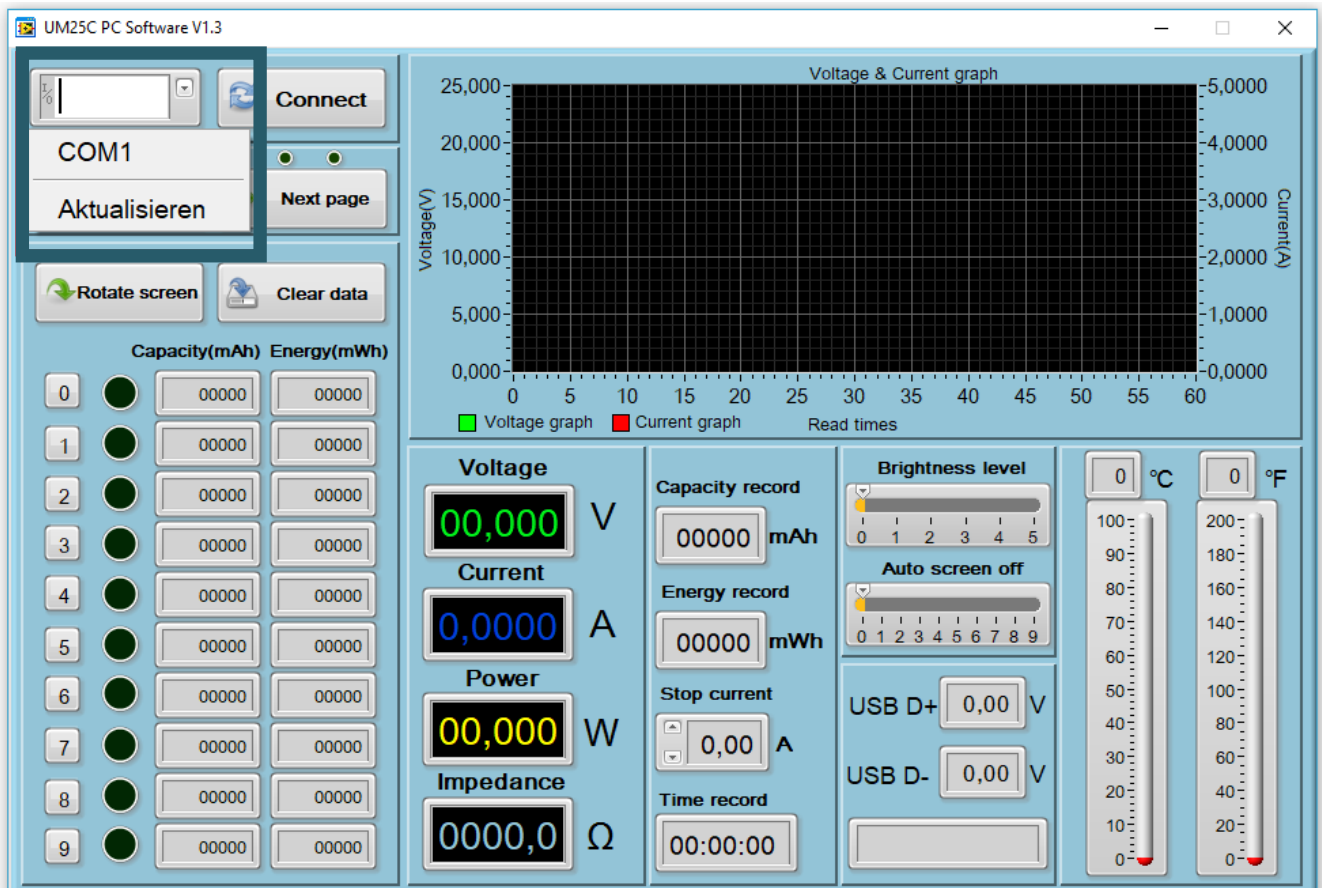
In order to be able to connect the installed software to the measuring instrument, it is necessary to know which port is used, to connect the instrument to your computer. To do this, select in the BT connection overview **BT settings**.

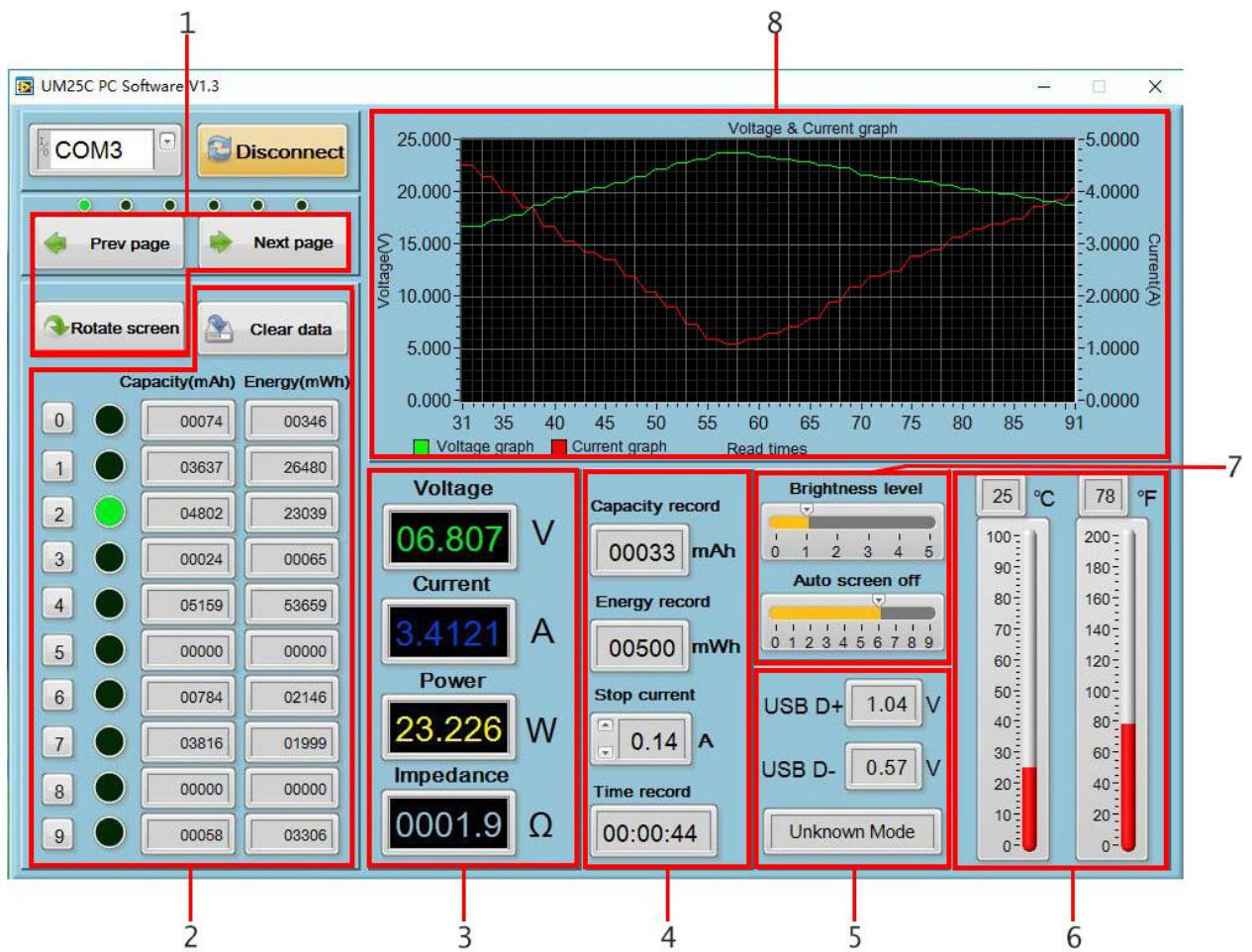
In the window that now opens, select the **COM ports** tab. The necessary interface in this case is **UM25C'Port'**.



2. Usage of the software

Now, open the **UM25C PC software V1.3**, which you have already installed on your computer. First, set the appropriate COM port to which the measuring device is connected to your computer and start the connection with the Connect button.





1	Basic functions (previous page, next page, rotate screen)
2	Data groups (direct selection of the data groups)
3	Main measuring interface
4	Data recording interface
5	QuickCharge interface
6	Temperature overview
7	Screen brightness, Time for automatical image shut down
8	Voltage-current diagram

With a right click within the voltage-current diagram, further options are available. Here, you can automatically scale the x-axis, copy the current data to the clipboard or rather export it as an Excel file, export the current graph as an image or delete the current graph.

5. ANDROID APP

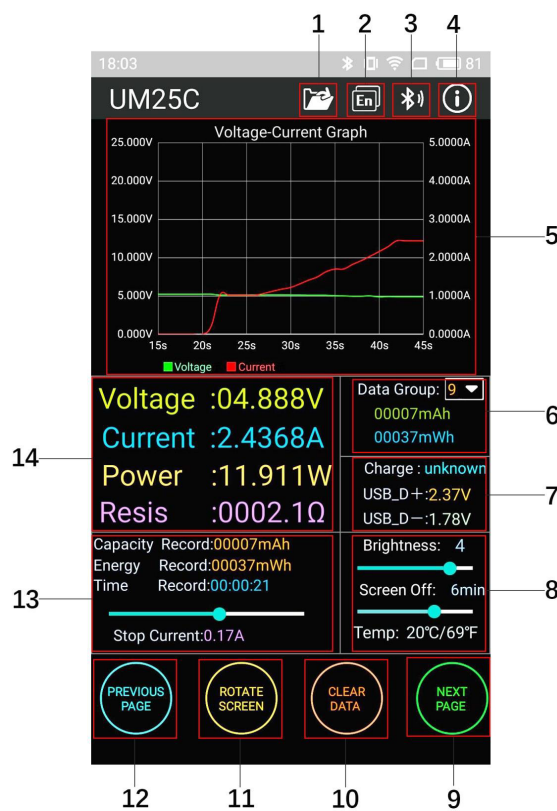
First download the app installation file [here](#) on your Android device and install the application.



Attention! The application can only be used with Android 5.0 or higher.

Activate BT with the BT button on the meter, then establish the connection to the meter using the BT settings on your device. Use either **0000** or **1234** as the PIN during connection.

After the installation and connection is complete, you can start the application.



1	Data export	8	Brightness and temperature adjustment
2	Language settings	9	Go to the next page
3	BT connection	10	Reset current data group
4	General information	11	Rotation of the display
5	Voltage-current diagram	12	Go to the previous page
6	Accumulated mAh and mWh	13	Recording the charging process
7	QuickCharge detection, D+ and D- Data voltage signal	14	Main measured values

6. OTHER INFORMATION

Our information and take-back obligations according to the Electrical and Electronic Equipment Act (ElektroG)

Symbol on electrical and electronic equipment:

This crossed-out dustbin means that electrical and electronic appliances do **not** belong in the household waste. You must return the old appliances to a collection point. Before handing over waste batteries and accumulators that are not enclosed by waste equipment must be separated from it.



Return options:

As an end user, you can return your old device (which essentially fulfills the same function as the new device purchased from us) free of charge for disposal when you purchase a new device. Small appliances with no external dimensions greater than 25 cm can be disposed of in normal household quantities independently of the purchase of a new appliance.

Possibility of return at our company location during opening hours:

SIMAC Electronics GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn, Germany

Possibility of return in your area:

We will send you a parcel stamp with which you can return the device to us free of charge. Please contact us by e-mail at Service@joy-it.net or by telephone.

Information on packaging:

If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

7. SUPPORT

If there are still any issues pending or problems arising after your purchase, we will support you by e-mail, telephone and with our ticket support system.

E-Mail: service@joy-it.net

Ticket system: <https://support.joy-it.net>

Telephone: +49 (0)2845 9360-50

For further information please visit our website:

www.joy-it.net