

# JT-TC66C

Low Cost USB 3.0 Volt- and Amperemeter



## 1. GENERAL INFORMATION

Dear customer,

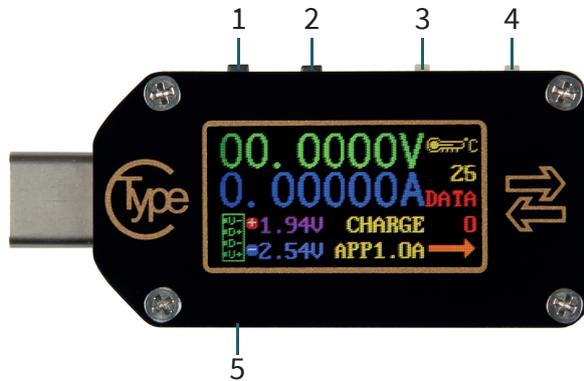
Thank you for choosing our product. In the following, we will show you what you need to consider during setup and use.

Should you unexpectedly encounter problems during use, please feel free to contact us.

## 2. SETTING UP & NAVIGATION

Simply plug in the TC66C measuring device into an USB-C interface of your device. The TC66C is immediately ready for use.

This measuring device has following keys and functions:



1 (K1): Switches between the values or opens the menu.

2 (K2): Press long to open or leave the menu.  
Press short to switch the menu.

3 (PWR): Power switch. When this function is activated, you can use the power supply of the system. When the function is deactivated, you can use an autonomous power supply unit. For high-precision and low-voltage measurements, you can turn this switch to OFF and use the Micro-USB-port for voltage supply.

4 (PD): PD-Switch. Set this switch to OFF when measuring a device that is being charged. Set the switch to ON to activate the trigger function.

5: Micro-USB-Port for independent power supply and for connection to the PC software.

### 3. USAGE OF THE DEVICE

When the measuring instrument is switched on, the last active menu is automatically called up.

A total of eight different menus are available, through which you can navigate using the K1 and K2 keys. Press and hold the K2 button to open the submenu in the respective menu.

The following menus are available:

1. Main menu
2. Record menu
3. QuickCharge recognition
4. QuickCharge protocol detection
5. Protocol trigger
6. System settings
7. System information
8. Simplified measurement overview

#### 3.1 MAIN MENU

1. Measured voltage
2. Measured current
3. Measured charge
4. Measured energy
5. Measured load impedance
6. Measured power
7. Measured temperature
8. Selected data group
9. Current flow direction



Press and hold the K1 button to delete the current data group value.

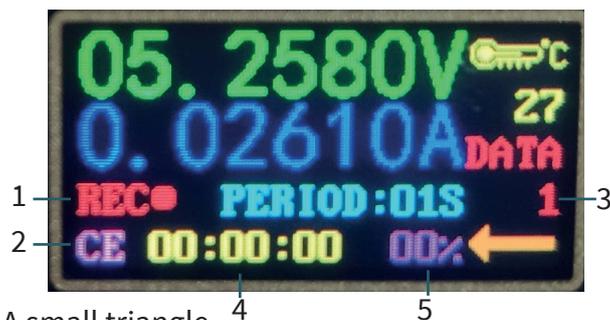
Press and hold K2 to change the data group.

With selected data group 1, charge and energy values are stored and will be continued when the device is restarted.

With selected data group 0, the values are also stored and displayed when restarting, the values are flashing. However, if a charge of 1mAh is exceeded, the data is reset to 1mAh.

### 3.2 RECORD MENU

1. Recording status icon
2. Reset recorded data
3. Interval of data recording
4. Recording time
5. Percentage of used storage



To make settings in the recording menu, press and hold K2. A small triangle points to the function you can set, you can then switch between the functions with K2 and select the functions with K1.

If the recording status icon lights red, the recording is interrupted, it lights green when it is recording.

The recording data can be reset under CE.

The data recording interval can be set from 1-60 seconds, but only when the recording is paused and the recording time is reset.

Press and hold K2 to exit the settings.

If you switch off the device, the recording is interrupted.

### 3.3 QUICKCHARGE-RECOGNITION

The unit can automatically detect and display the current quick charge mode.

1. D+ signal voltage
2. D- signal voltage
3. Current charging mode



The following charging modes are supported: QC2.0, QC3.0, APPLE 2.4A/2.1A/1A/0.5A, Android DCP, Samsung.

Note that the values displayed are only references, not absolute values.

### 3.4 QUICKCHARGE PROTOCOL DETECTION

With this function the device automatically detects which QuickCharge protocol is currently in use.

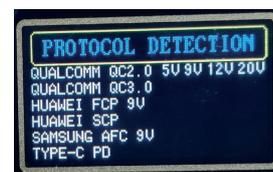
**ATTENTION!** This function increases the output voltage of the USB-C port. Make sure that your connected load is compatible or remove it.

Keep K2 pressed, now "Dangerous" appears on the display.

With K1 you can start the detection. Supported protocols are displayed in green, unsupported protocols in red.

The following protocols can be detected automatically:

QC2.0, QC3.0, Huawei FCP, Huawei SCP, Samsung AFC and Type-C PD



## 3.5 PROTOCOL TRIGGER

This menu allows you to initiate a quick charge protocol even if your load does not have this quick charge function.



**ATTENTION!** This function increases the output voltage of the USB-C port. Make sure that your connected load is compatible or remove it.

Keep K2 pressed to enter the menu.

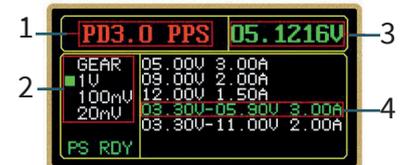
With K2 you can navigate through the menu and with K1 into the submenus.

With K1 and K2 you can trigger the protocol and adjust the voltage. Keep K2 pressed to get back.

### 3.5.1 PD-TRIGGER

To get into this menu you have to navigate in the protocol trigger menu to the item USB-C PD and then press K1.

1. Current PD mode
2. PPS voltages
3. Actual output voltage
- 4 Green: Current voltage  
White: Supported voltages



Now disconnect the power supply and reconnect it. With K1/K2 you can adjust the PD voltage. Keep K1 pressed to change the PPS voltage step size. Keep K2 pressed to exit the menu.

## 3.6 SYSTEM SETTINGS

In the system settings you can make various settings, including:

1. Display illumination time
2. Backlight
3. Temperature unit
4. USB connection
5. BT wireless connection
6. Screen rotate
7. CC Pin Pulldown
8. Language
9. Factory settings

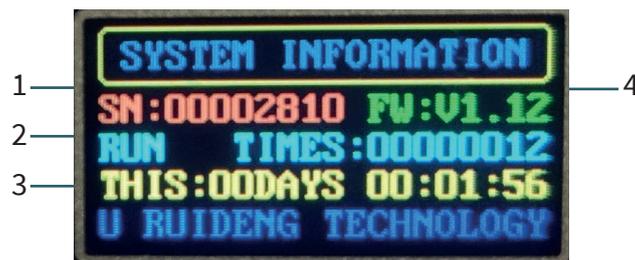


Use K2 to navigate through the menu and K1 to select settings.

### 3.7 SYSTEM INFORMATION

In this menu you can display the system information.

1. Serial number of the device
2. Number of starts
3. Time since the device has been switched on
4. Firmware version



### 3.8 SIMPLIFIED MEASUREMENT OVERVIEW

This simplified measurement overview only shows the current voltage(1), displays the actual current(2), the actual power(3) and the actual current flow direction(4).



## 4. OTHER INFORMATION

Our information and return obligations according to the Electrical and Electronic Equipment Act (ElektroG)

**Symbol on electrical and electronic equipment:**



This crossed-out wheeled garbage can means that electrical and electronic equipment does not belong in household waste. You must hand in your old appliances at a collection point. Before you hand in the waste batteries and accumulators that are not enclosed in the waste equipment, you must separate them from the equipment.

**Return options:**

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

**Possibility of return to our company site during opening hours:**

Simac GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

**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. For this purpose please contact us by e-mail at [Service@joy-it.net](mailto:Service@joy-it.net) or by phone to us.

**Information on packaging:**

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

## 5. SUPPORT

We are also there for you after the purchase. If there are still questions or problems, we are also available via e-mail, phone and ticket support system.

E-Mail: [service@joy-it.net](mailto:service@joy-it.net)

Ticket-System: <http://support.joy-it.net>

Telephone: +49 (0)2845 98469 – 66 (10 - 17 Uhr)

For more information please visit our website:

[www.joy-it.net](http://www.joy-it.net)