

XY3605 manual

Mini CNC DC buck-boost power supply XY3605

Synchronous rectification Typical efficiency 95%

5.0V~30.0V

Input voltage

0.0~36V

Output voltage

5.1A

Output current

180W

Output Power

10group

Storage space



Small and exquisite

Standard configuration (XY3605): minimalist operation + remote control digital keyboard control

High configuration (XY3605-W): mobile phone APP+PC host computer/LAN real-time communication/external network control and viewing.

CNC DC buck-boost power supply

Aluminum alloy CNC shell, compact size,
synchronous rectification, typical efficiency 95%

Minimal operation + remote control numeric keyboard input, efficient and fast!

Adopting a 1.14-inch high-resolution LCD screen with a full viewing angle, you can see clear, delicate and natural images no matter which angle you look at!

5.0v~30.0v | 0.0~36v | 5.1A | 180w | 10group
Input voltage | Output voltage | Output current | Output Power | Storage space



Power main interface

Capacity record interface

Voltage/current curve interface

Power parameter setting interface
With scroll bar indication

System parameter setting interface

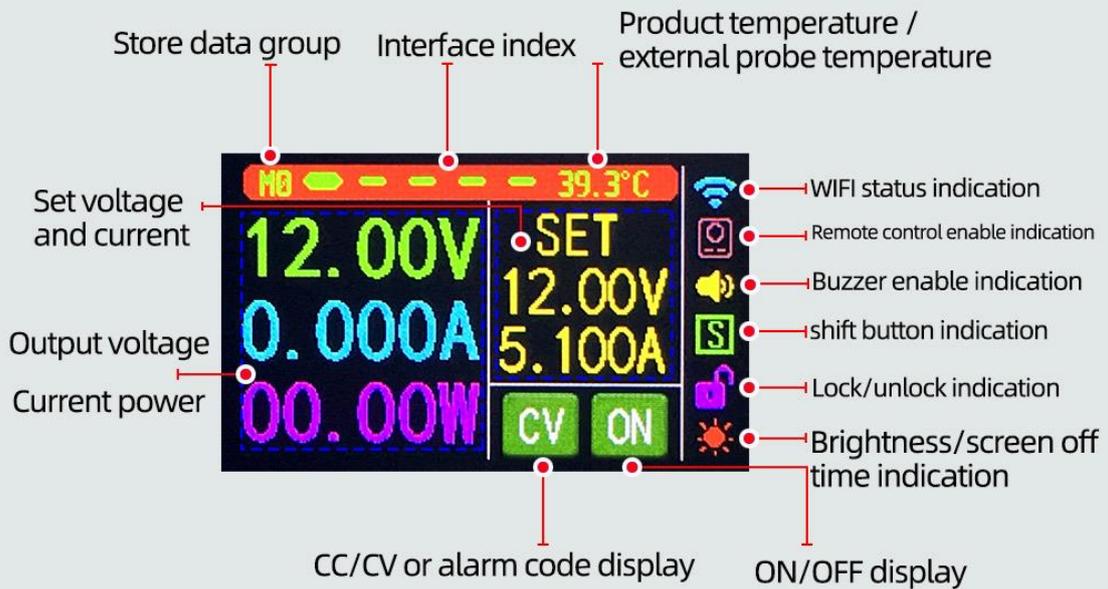
Product parameter	
Input voltage:	DC5.0~30V (Ultimate low voltage 4.5V, extreme high voltage 35V)
Output voltage:	DC0.0V~36V
Output current:	0.000A~5.100A
Output Power:	180W
Input current limit:	MAX 10A
Voltage resolution:	0.01V
Current resolution:	0.001A
Voltage accuracy:	±0.4%+1个 byte
Current accuracy:	±0.5%+3个 byte
Capacity:	0-999999AH
Energy:	0-999999WH
Time:	0-1000 huors

Has a nearly perfect protection mechanism:
Hardware protection: Input anti-reverse connection protection, output short-circuit protection, short connection will not burn.
Software protection: 过 Overvoltage protection (OVP), over current protection (OCP), over power protection (OPP), over temperature protection (OTP), input under voltage protection (LVP).

Note: Full-load output power supply requirements: input power supply
Optional 20V~30V, power above 200W.

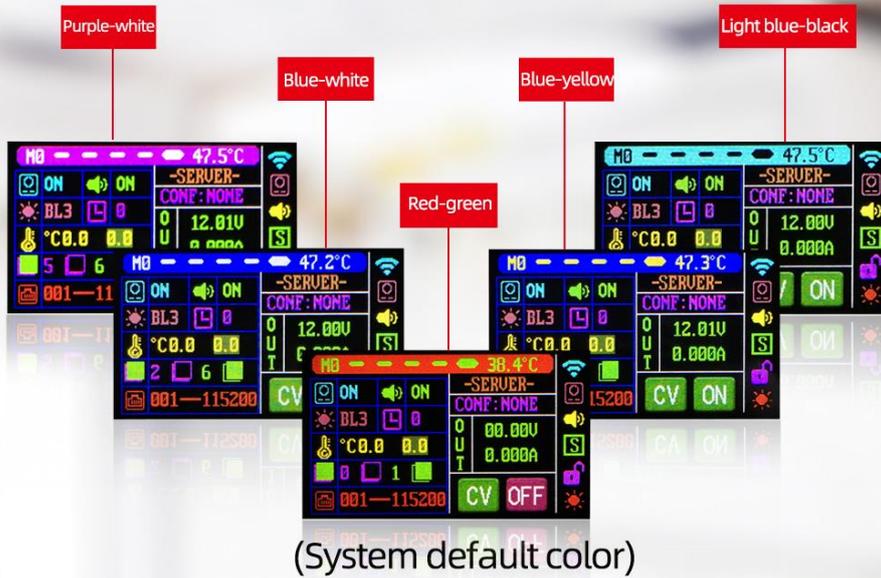
The lower the input voltage, the smaller the output power. When the output voltage is lower than 2V, the output current should be reduced.

Main interface introduction:

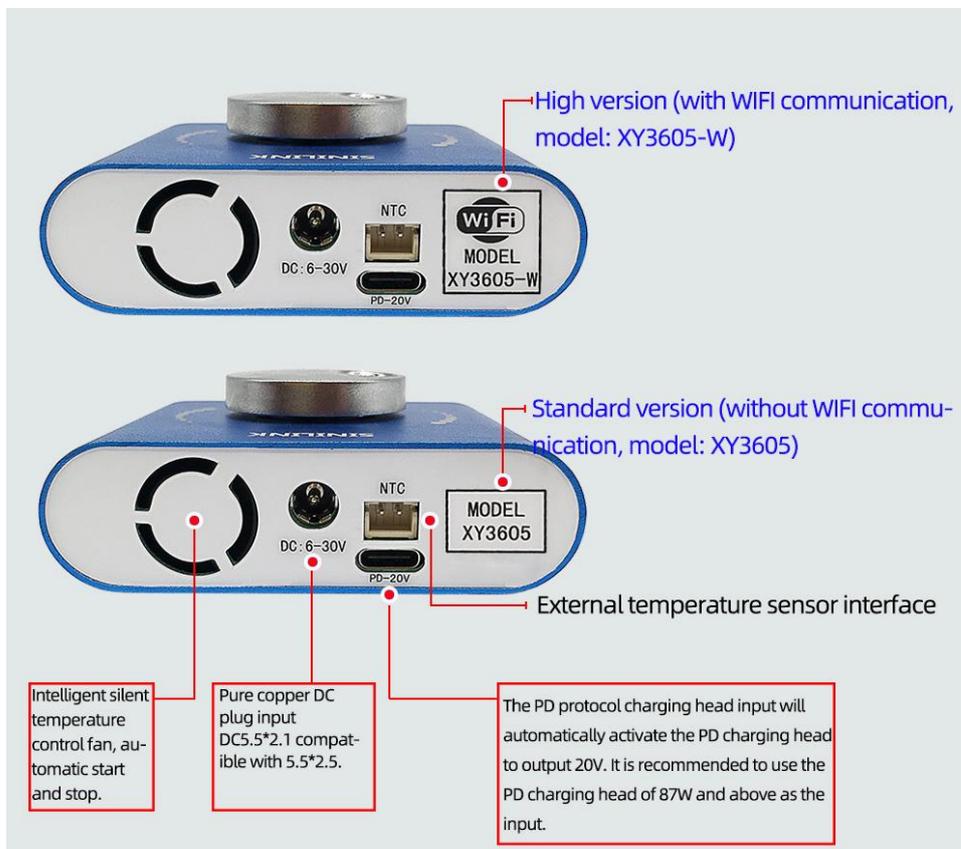


Change the theme color freely

The foreground and background colors can be switched at will, 64 colors are at your disposal, matching your exclusive colors!



Short press the rotary encoder button, select the corresponding position, the corresponding number will be reversed, use the rotary encoder to switch the theme background color and foreground color



Product Size

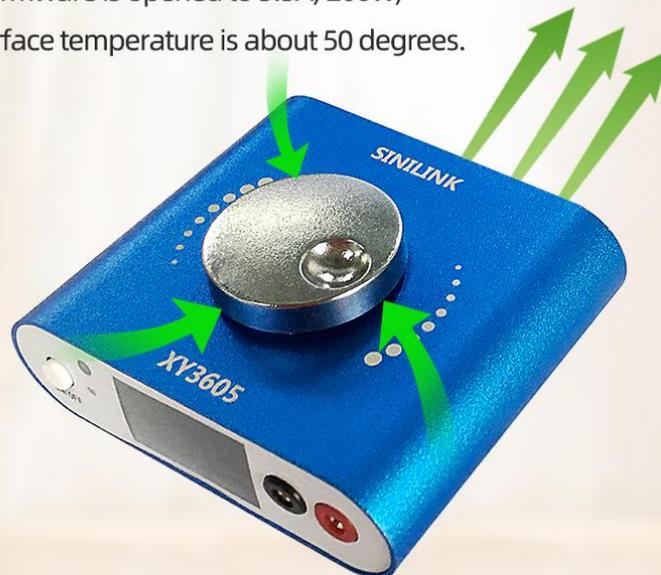


Small size

77mm*66mm*29mm

Weight: 245g

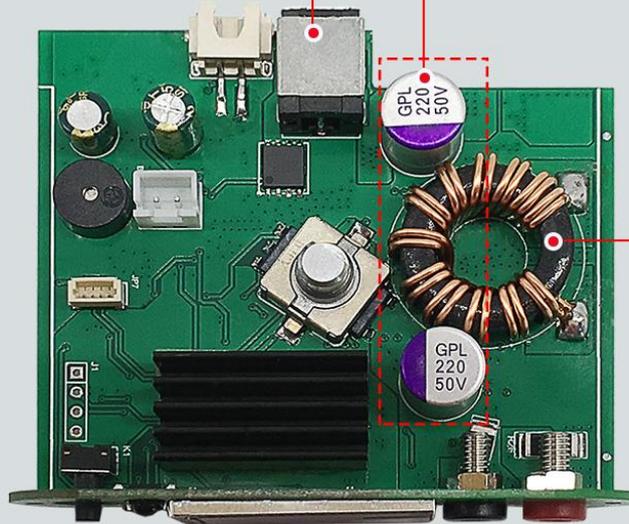
Reasonable airflow and heat dissipation structure, such a small size, when the full power is 180W, the surface temperature is only about 45 degrees. When the product firmware is opened to 5.5A, 200W, 200W, the surface temperature is about 50 degrees.



Bare board display, real materials,
please do not disassemble, disassembly does not guarantee

Pure copper silver-plated DC plug

Original imported solid capacitors



20A high-power
high-temperature re-
sistant dual-wire and
wound iron-silicon alu-
minum magnetic toroi-
dal inductor.

Free high-quality power cord and 1 meter long NTC temperature sensor

2MM banana plug to alligator clip

■ 5A high current

■ Cord length 60 cm

■ Soft wire

■ Good texture



Special remote control for CNC power supply

CNC power supply enters the era of remote control and digital keyboard control



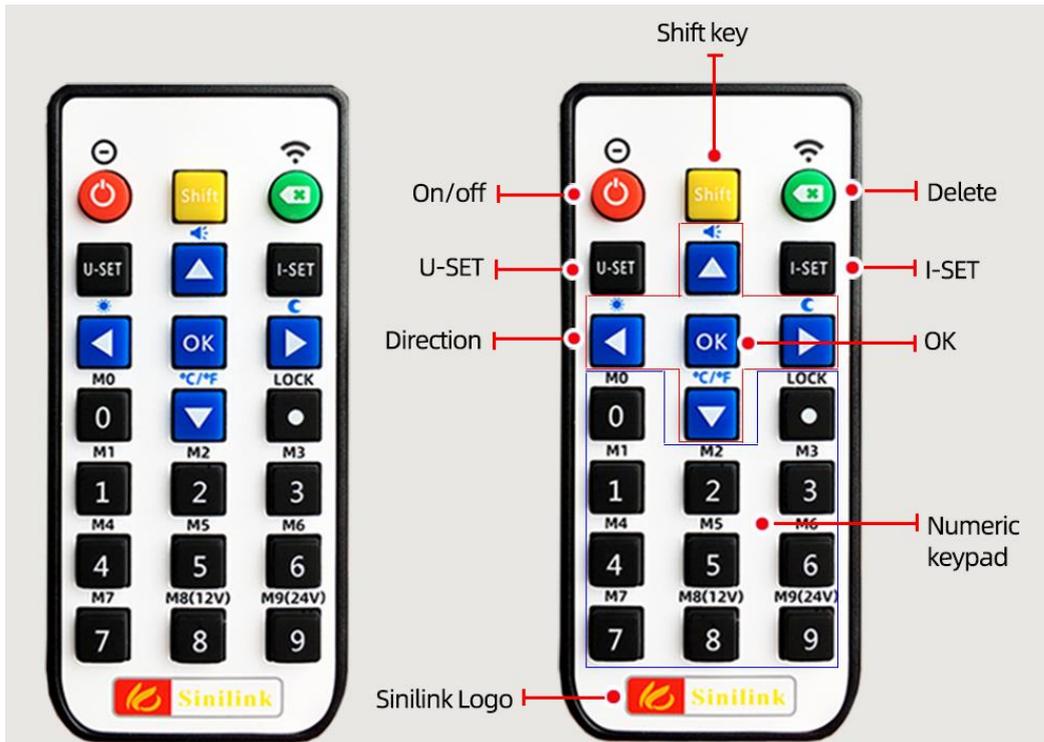
✓ Silicone buttons

✓ Numeric keypad

✓ Efficient and fast

✓ Full functioning





Key and function description

ON/OFF	Turn on/off power output	Delete	Delete/return
U-SET	Set voltage	I-SET	Set current
Shift	Function key Shift	OK	Confirm/select
Direction	Up and down adjustment, left and right shift/page turning		
Numbers	Digital input: For example, to set the voltage, click and click on the numeric keyboard "12.5" to complete the voltage setting operation		
Shift+	Power on/off	Shift+	Fast distribution network
Shift+	Turn on and off the buzzer	Shift+	Switching between Celsius °C and Fahrenheit °F
Shift+	Brightness adjustment (B0~B5, 6-block brightness)	Shift+	Set screen off time (0-9 minutes)
Shift+	Lock/unlock keys	Shift+ 	Quickly recall data group M0~M9
<p>! Note: 1: Brightness adjustment B0~B5 can directly input the numbers "0~5" or adjust by " ".</p> <p>2: The screen-off time (0-9 minutes) can be directly input the number "0-9" or can be adjusted by " ".</p> <p>3: M8/M9 are 12V/24V for quick transfer, used for 12V/24V electric soldering iron temperature adjustment or fan speed adjustment.</p>			



Introduction of high version XY3605-W

The product is connected to the Internet through the router 2.4G wifi, the internal network is directly transparent, real-time communication, and there is an external network server, so as long as the network status is connected, and the distance is unlimited, you can control and view data anytime and anywhere.

APP download address:

For foreign customers, please download from Google Market, search for 'sinilink' to download

Computer client software download address:

<http://www.sinilink.com/download/tools/Sinilink-Setup.exe>

APP interface can add multiple devices, support Android system and IOS system.

High version With WIFI communication XY3605-W

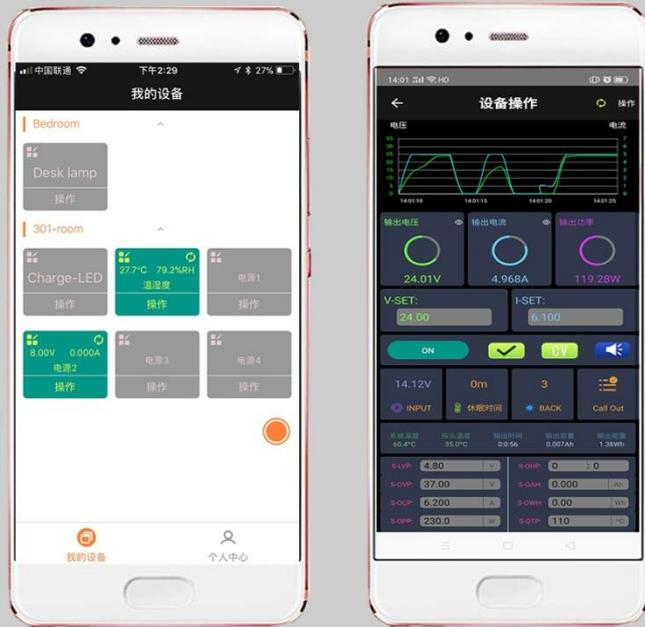
Synchronous rectification Typical efficiency 95%

5.0v~30.0v	0.0~36v	5.A	180w	10group
Input voltage	Output voltage	Output current	Output Power	Storage space



- Mobile APP
- LAN real-time communication
- PC upper computer
- External network control and viewing

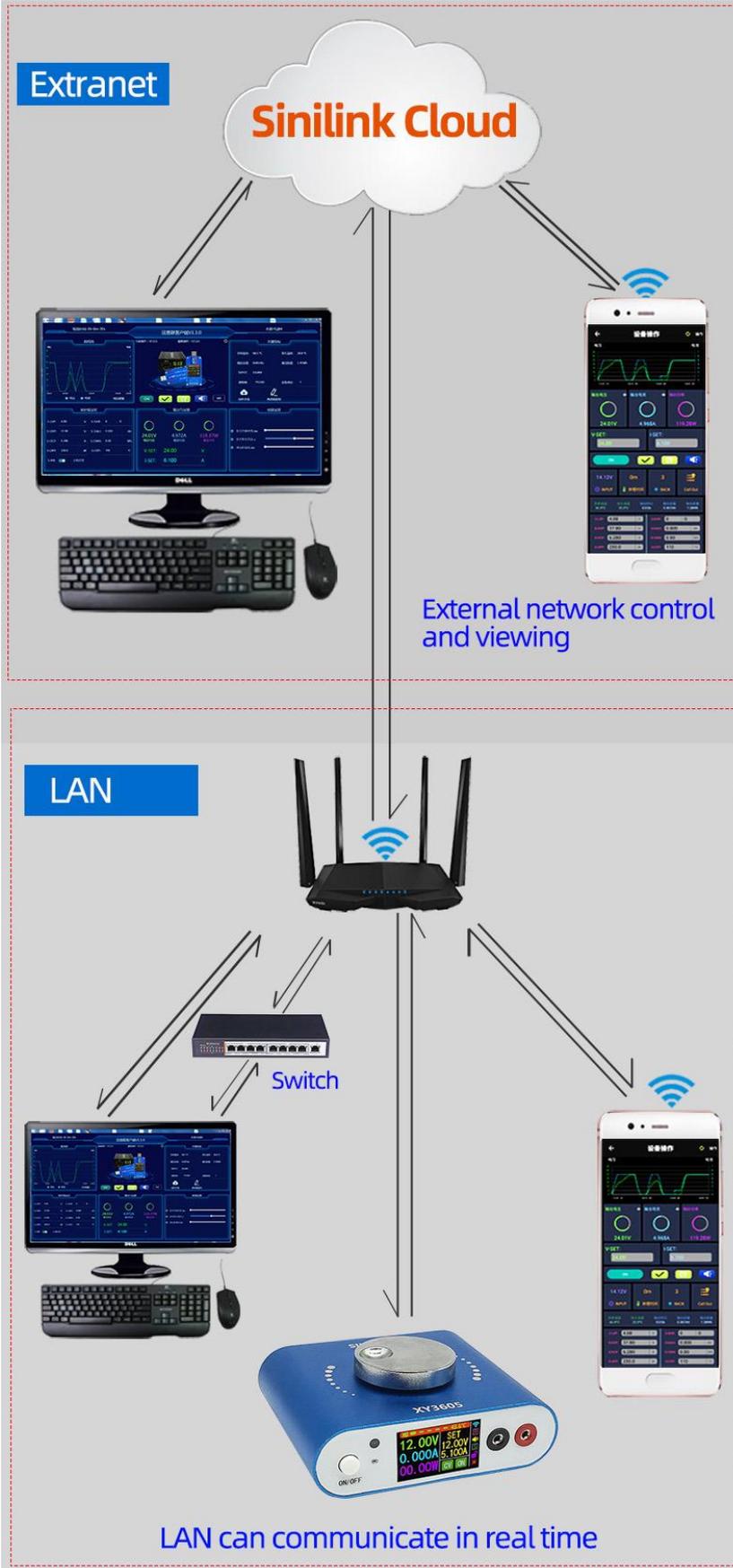
Mobile APP interface



Computer client interface



Sinilink power system communication diagram



WiFi module for CNC power supply Industry milestones



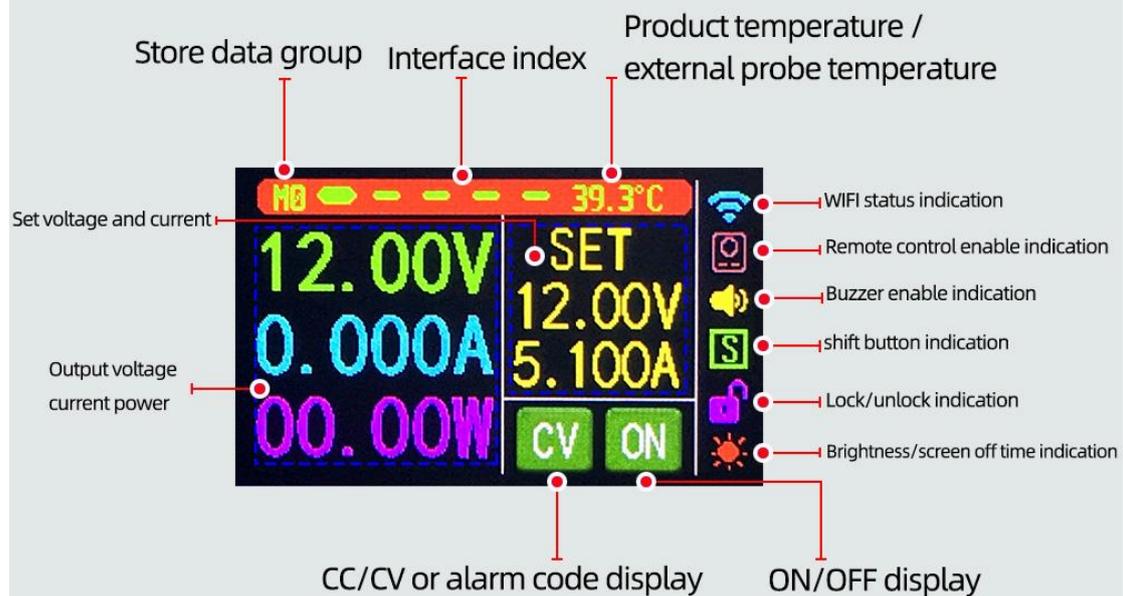
- Mobile APP
- PC upper computer
- LAN real-time communication
- External network control and viewing
- Support multi-machine communication
- Support Tmall Genie, Baidu Voice, Xiao Ai voice control switch
- Open source design

Detailed interface and key functions:

Short press the 'ON/OFF' button to turn on and off the power output,
long press the 'ON/OFF' button for 2 seconds, the screen rotates
and can be rotated 360° in four directions.

Rotary encoder potentiometer to realize fast page turning.

Main interface introduction



Short press the code potentiometer button to activate the parameter (voltage/current) to be set;

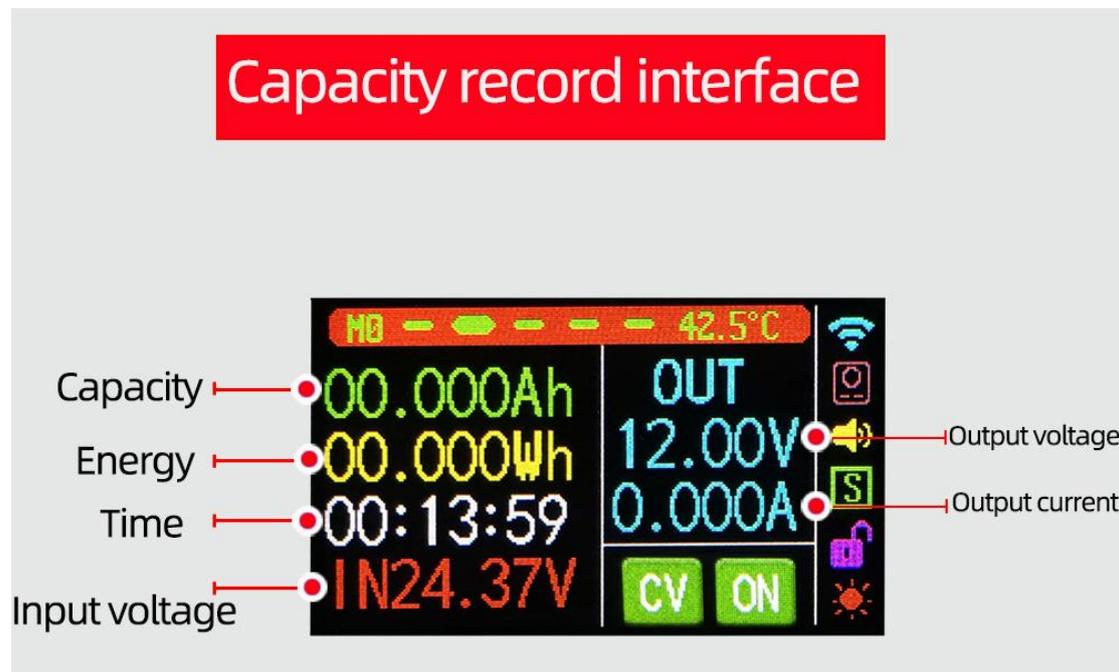
Switch between full selection and bit selection by short pressing the code potentiometer button;

After selecting all, all will be displayed in reverse blue, and the set voltage/set current can be switched through the rotary encoder;

After the bit is selected, the corresponding bit will be displayed in reverse blue, and the parameters can be set through the rotary encoder;

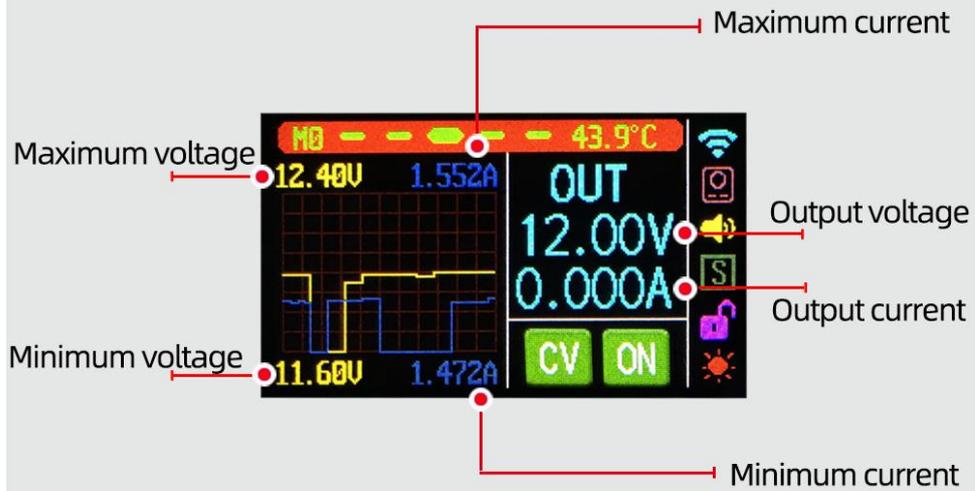
After the setting is completed, long press the code potentiometer button for 2 seconds or no button operation for more than 6 seconds will automatically exit the setting;

All parameters are automatically saved after exit.



Short press the coding potentiometer button, select all 'capacity/energy/time', and the corresponding ones will be displayed in reverse blue after all selections. Use the rotary encoder to switch the parameter to be cleared. After selecting, short press the coding potentiometer button, Clear the corresponding parameter; after selecting, long press the code potentiometer button for 2 seconds or no button operation for more than 6 seconds, it will automatically exit.

Voltage and current curve interface



Each grid represents 0.1V/0.01A

Short press the code potentiometer button to pause/start curve writing

Power parameter setting interface

The interface consists of three vertically stacked LCD screens. Each screen has a status bar at the top with 'MO', a battery level indicator, and a temperature reading (28.8°C, 29.8°C, and 30.3°C respectively). The right side of each screen features a vertical scroll bar and several icons: a power button, a speaker, a 'S' button, a lock, and a sun icon. The main display area is divided into two columns. The left column shows various parameters in green text, and the right column shows 'OUT' followed by output voltage and current in blue text. At the bottom of each screen are two green buttons labeled 'CV' and 'ON'.

Screen 1 (Top):

- Store data group: points to the 'MO' status bar.
- Set voltage: points to 'VSET:05.00V'.
- Set current: points to 'ISET:1.000A'.
- Input undervoltage protection: points to 'LVP:04.80V'.
- Power on/off by default: points to the power button icon.

Screen 2 (Middle):

- Output overvoltage protection: points to 'OVP:37.00V'.
- Output overcurrent protection: points to 'OCP:5.500A'.
- Output power protection: points to 'OPP:185.0W'.
- Over temperature protection: points to 'OTP:110°C'.
- Scroll bar indication: points to the vertical scroll bar.

Screen 3 (Bottom):

- Maximum running time: points to 'OHP:000:00h'.
- Maximum capacity: points to 'OAH:00.000Ah'.
- Maximum energy: points to 'OWH:000.00Wh'.
- Output voltage: points to '05.00V'.
- Output current: points to '0.000A'.

Short press the code potentiometer button to activate the parameter to be set;

Switch the parameter name and position selection by short pressing

the key of the code potentiometer;

After selecting the parameter name, the parameter name will be displayed in reverse blue, and the parameter to be set can be switched by rotating the encoder potentiometer;

After the bit is selected, the corresponding bit will be displayed in reverse blue, and the parameters can be set through the rotary encoder;

After the setting is completed, long press the code potentiometer button for 2 seconds or no button operation for more than 6 seconds will automatically exit the setting;

All parameters are automatically saved after exit.

Data group function description:

You can save a total of 10 data groups M0-M9, and the default is saved to data group M0. Press and hold the code potentiometer button for 2 seconds on any interface to quickly call up the M1/M2 data group. The current data group serial number will be displayed at the interface index. ;

In the power supply parameter setting interface, after selecting the data group, rotate the encoder potentiometer to adjust the corresponding data group;

After the parameter modification in the data group is completed, the

corresponding parameters will be stored in the current data group by default.

Note: The power output is turned off by default after switching the data group;

Set voltage U-SET: 0-36.00V;

Set current I-SET: 0-5.5A;

Input undervoltage protection LVP default: 4.0V, can be set by yourself;

Output overvoltage protection OVP default: 37V, can be set by yourself;

Output overcurrent protection OCP default: 5.6A, can be set by yourself;

Output over power protection OPP default: 205W, can be set by yourself;

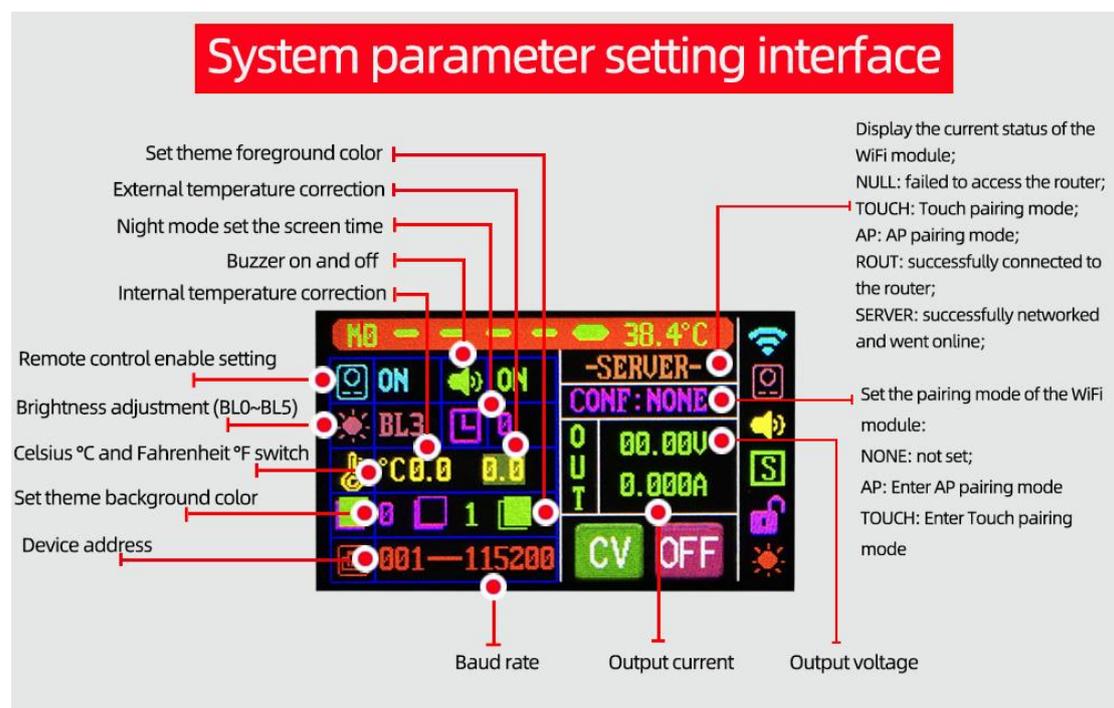
Maximum operating time OHP: When the parameter is not set to 0, turn on this function, when it runs to the set time, the power supply will automatically turn off the output;

Maximum capacity OAH: When the parameter is not 0, turn on this function, and when the capacity reaches the set parameter, the power will automatically turn off the output;

Maximum energy OWH: When the parameter is not 0, turn on this

function, when the energy reaches the set parameter, the power will automatically turn off the output;

OHP/OAH/OWH function, can well realize timing/quantitative power supply.



Short press the code potentiometer button to select/switch the parameter to be set. After selecting, the parameter will be reversed and set the parameter through the rotary encoder;

After the setting is completed, long press the code potentiometer button for 2 seconds or no button operation for more than 6 seconds will automatically exit the setting;

All parameters are automatically saved after exit.

Product networking steps:

In the distribution network interface, first select touch pairing mode for pairing. If pairing

fails, please select AP pairing mode for pairing.

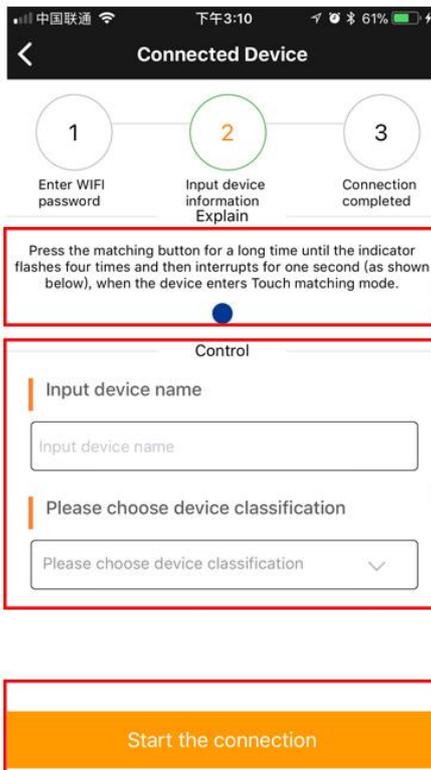
Step 1



During the pairing process, the WiFi network must be 2.4G, and 5g network cannot be paired. (if your WiFi router 2.4G and 5g are network combined, please reconfigure the router, separate them, and select 2.4G network)

Press "+" to add device

Step 2



When the product is powered on, it will enter touch pairing mode by default.

Custom device name and classification

Step 3: Click "start the connection"