

Features:

1. Use high-quality materials, durable
2. Constant voltage and constant current CNC DC stabilized voltage power supply
3. Large screen display, full view dedicated power LCD
4. Support serial communication and standard MODBUS protocol
5. Complete display, simple operation and stable performance

Parameters:

Input voltage: 6.0~70V

Output voltage: 0.0~60V

Output current: 0~20.00A

Typical value of output ripple: 100mv VPP

Output power: 0~1200W

Maximum output voltage: $(\text{input voltage} + 1.1) - 2$

Input voltage measurement resolution: 0.01V

Output voltage setting measurement resolution: 0.01V

Current setting measurement resolution: 0.01A

Input voltage measurement accuracy: $\pm 1\% + 5$ characters

Output voltage setting and measurement accuracy: $\pm 0.4\% + 1$ word

Output current setting and measurement accuracy: $\pm 0.5\% + 3$ words

Cooling fan on: current > 2A power > 50W temperature > 50 °C

Turn off the cooling fan after it is turned on: current < 1.5A, power < 45W, temperature < 45 °C

Protection mechanism:

External temperature protection: 0 - 110 ° C default off

Input overvoltage protection: 71V default

Input undervoltage protection: 4.8-71V adjustable default 4.8V

Output overvoltage protection: 0-65V Default: 65V

Output overcurrent protection: 0-16A, default 16A

Output over power protection: 0-950W Default: 950W

Over temperature protection: 60 -- 110 ° C, 95 ° C by default

Timeout protection: 0 - 100H adjustable default off

Overcapacity protection: 0~9999AH is adjustable and closed by default

Super energy protection: 0~9999WH, adjustable and closed by default

Package include:

Package A:

Header * 1

Base plate * 1

Wire * 2

Package B:

Bottom plate * 1 (output current 0-20A can be used separately for the bottom plate)

8. Details of other functions:

8.1 Capacity/Energy/running time Statistics:

After the power is turned ON (ON), the statistics will be automatically started. After the power is turned OFF (OFF), the value of the previous state will be displayed. After the power is turned on again (ON), the record will be automatically restarted. ON the corresponding screen, press and hold ON/OFF

 Key 2 seconds will automatically clear the corresponding data.

8.2 Setting the Maximum capacity, Maximum Energy, and Maximum Running Time

8.2.1. Setting the Maximum capacity (OAH)/energy (OPH) : When the OAH/OPH function is started and the statistical capacity/energy is higher than the set maximum capacity/energy, the power supply automatically shuts down the output and flashes "OAH" /"OPH"; After the alarm is removed, the capacity/energy statistics will be cleared automatically.

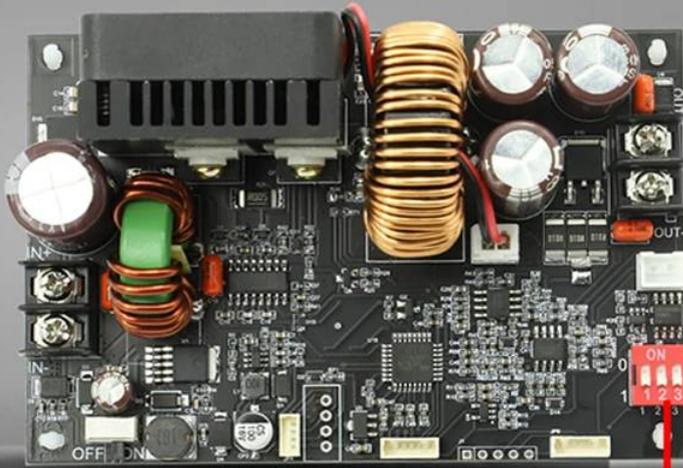
8.2.2. Setting the Maximum Discharge Time (OHP) : After the OHP function is enabled, when the running time of the power supply is greater than the set maximum discharge time, the power output will be automatically turned off and "OHP" will blink. After the OHP alarm is lifted, the time statistics will be cleared automatically.

This function can achieve a good quantitative/timed power supply.

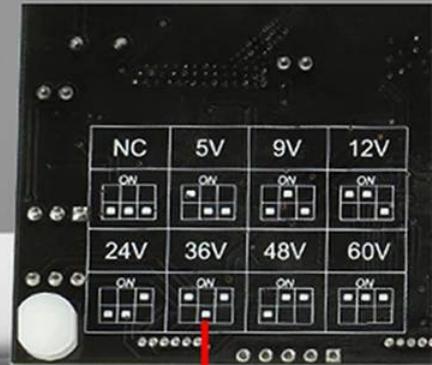
Note: When OAP/OPH and OHP functions are not enabled, the power supply will automatically record the capacity/energy and running time. After OAH/OPH and OHP functions are enabled, the power supply will automatically shut down the output after reaching the set value. After OHP function is enabled, the running time of power supply is countdown mode;

Set the output voltage through the DIP switch

Fixed output can be set voltage: 5V/9V/12V/24V/36V/48V/60V



Truth table on back of baseboard



NC indicates the numerical control gear
This gear must be set when using the dial head numerical control to adjust pressure

NC	5V	9V	12V
24V	36V	48V	60V

Product parameters

Product name	Nc DC regulated power supply	Product Model	XY6020L
Input voltage	6.0~70V	Output voltage	0.0~60V
Input current	0~20.00A	Output ripple typical value	100mv VPP
Power output	0~1200W	Maximum output voltage	(Input voltage ÷ 1.1)-2
Input voltage Resolution of measurement	0.01V	The output voltage sets the measurement resolution	0.01V
Setting of current Resolution of measurement	0.01A	Input voltage measurement accuracy	±1%+5 Word
Output voltage setting and measurement accuracy	±0.4%+1 Word	Output current setting and measurement accuracy	±0.5%+3 Word
Heat dissipation fan on	Current >2A power > 50W Temperature >50°C	The heat dissipation fan is started and then closed	Current <1.5A power <45W Temperature <45°C

Protection mechanism

External temperature protection	0-110°C off by default	Input overvoltage protection	default 71V
Input undervoltage protection	(Adjustable 4.8-71V, default 4.8V)		
Output overvoltage protection	(65V, default is 65V)		
overcurrent protection	(Adjustable from 0 to 22.0A, default 22.0A)		
Over power protection	(1250 W, default is 1250W)		
Over temperature protection	60--110 °C, the default is 95 °C		
Time out protection	(Adjustable from 0 to 100h, off by default)		
Over capacity protection	(Adjustable from 0 to 9999Ah, disabled by default)		
Super energy protection	(Adjustable from 0 to 9999Wh, off by default)		

7.Data group function

This product has 10 sets of data from Cd0 to Cd9 (among which Cd8=12V and Cd=24V cannot be adjusted), and the data is saved in Cd0 by default. The specific methods for checking and modifying are as follows:



- 7.1. Long press **V/A** key for 2 seconds to enter the data group call out interface, the upper two lines display the set voltage value CV and set current value CC of the data group, and the number of the downstream display group is CD1-CD9;
- 7.2. Press **V/A** key to switch between setting voltage CV, setting current CC and data set serial number Cd, and modify parameter value through encoder;
- 7.3. After confirmation of the data group, long press **V/A** to pull out the data group and return to the operation interface;

3.Setting Parameters:



3.1 On the running screen, hold down **SW** for 2 seconds to enter the parameter setting screen.

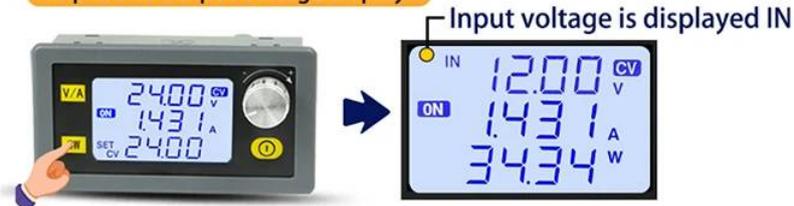
3.2 Press **SW** to switch the parameters to be set, press the encoder button to switch the bit selection, rotate the encoder and adjust the parameters;

3.3 ON the interface of Maximum Capacity (OAH)/Maximum Power (OPH)/-Maximum Running Time (OHP), press the "ON/OFF" **(I)** button to enable or disable the corresponding function. If the function is disabled, "----" will be displayed.

3.4 ON the Maximum Capacity (OAH)/Maximum Energy (OPH) screen, hold down ON/OFF **(I)** Button selection capacity range (9.999Ah/ 99.999AH /9999Ah /9999Ah,9.999Wh/ 99.999WH /9999Wh);

3.5 After the parameter setting is complete, hold down the **SW** button for 2 seconds to exit the setting screen. The Settings are automatically saved

4.Input and output voltage display:



Press the **SW** button on the running interface to switch the input and output voltage display.

CC/CV

NC DC regulated power supply

Complete display / simple operation / stable performance

Upgraded version Large screen display
full viewing angle dedicated power LCD



Supports the standard MODBUS protocol for serial communication

▶ New structure ▶ Synchronous rectification ▶ Typical efficiency 95%

6.0-70.00V Input voltage	0.0-60.00V Output voltage	0.0-20.00A output current	1200W output power	10 Storage space
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(The product provides DC power supply, but non-AC power supply is 220V)

5. View power (W)/ capacity (Ah)/ energy (Wh)/ time (h) :



In the operation interface, press the encoder button to switch the display power (W)/ capacity (Ah)/ energy (Wh)/ time (h).

6.Locking Function:



In the operation interface, long press the encoder button for 2 seconds to lock the voltage and current set to prevent misoperation; After locking, long press the encoder button for 2 seconds to unlock.

Instructions for Use



1. Set voltage and current:



In the operation interface, press **V/A** button to enter the setting voltage and current interface, LCD downlink display SET, CV flashes, set voltage selection and blink, then press **SW** or code potentiometer button to switch voltage selection, and adjust the set voltage through the rotary encoder; Press **V/A** button again, LCD downlink display CC flashes, set current bit selection and blink, press **SW** or code potentiometer button to switch current bit selection, adjust the set current through the rotary encoder; Press the **V/A** button again to exit and save the Settings to return to the operating interface; Long press the **V/A** button for 2 seconds or wait for 6 seconds without any key operation. Then the system will automatically exit and save the Settings, and return to the operation interface.

2. Quick setting of voltage or current:

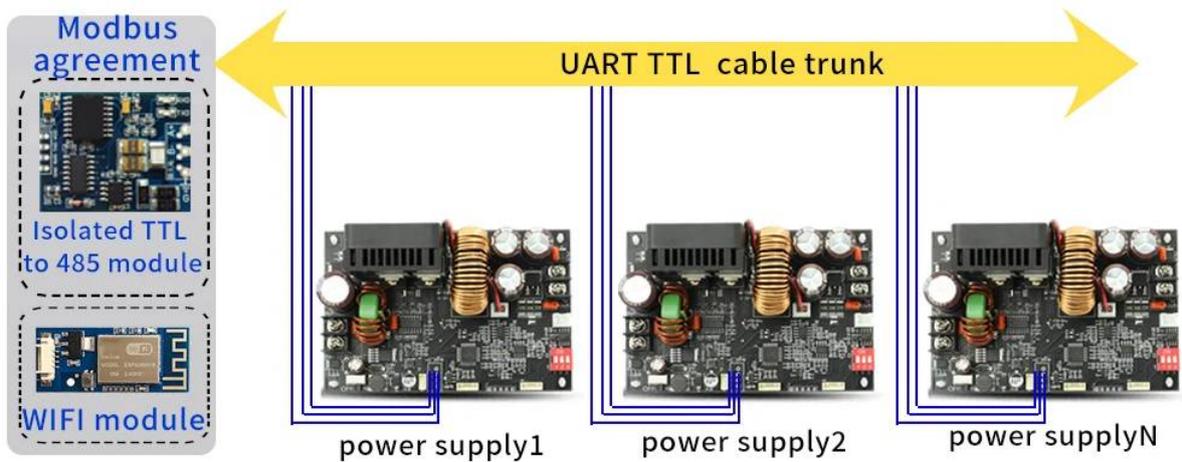


In the parameter setting interface, set parameter FET to CV or CC, rotate the encoder in the operation interface, then enter the setting voltage and current interface, rotary encoder, quickly set the voltage or current.

Low cost communication power supply

Through a TTL to 485 module or WIFI module, multi-machine remote control can be realized

A low cost communication control scheme can be realized with a single base plate



Constant voltage and constant current

buck

NC DC regulated power supply

**20A high current
peak combat force**

Output voltage **0.0-60.00V**

output current **0.0-20.00A**

output power **1200W**

Storage space **10 group**

Supports the standard
MODBUS protocol for
serial communication



Complete display
Easy to operate
Stable performance

Upgraded version Large screen display
full viewing angle dedicated power LCD

Press and hold **SW** the button for 2 seconds to enter the parameter setting screen

<p>Set input voltage undervoltage protection (LVP) The default value is 4.8V</p> <p>IN</p> <p>LVP</p> <p>SET 04.80</p>	<p>Setting up overvoltage protection (OVP) The default value is 65.00V</p> <p>OVP</p> <p>SET 65.00</p>	<p>Setting Overcurrent Protection (OCP) The default is 22.00A</p> <p>OCP</p> <p>SET 22.00</p>
<p>Setting over power Protection (OPP) Default 1250W</p> <p>OPP</p> <p>SET 1250^W</p>	<p>Setting Maximum Capacity (OAH) Over capacity protection</p> <p>OAH</p> <p>SET 10.00^{Ah}</p>	<p>Set maximum Energy (OPH) Super energy protection (---: disabled)</p> <p>OPH</p> <p>SET ---Wh</p>
<p>Setting the running Time (OHP) Time out protection</p> <p>OHP</p> <p>SET 02:40</p>	<p>Over temperature protection(OTP)</p> <p>OTP</p> <p>SET 095C</p>	<p>External Temperature Protection (ETP) Off by default</p> <p>ETP</p> <p>SET ---C</p>
<p>Device address</p> <p>Add</p> <p>SET 001</p>	<p>Set the power-on state</p> <p>PO_n</p> <p>SET 0_n</p> <p>0_n Power-on is enabled by default</p> <p>OFF The power-on is disabled by default</p>	<p>Set the rotary encoder on the operation interface,Default set of parameters (CV or CC)</p> <p>FET</p> <p>SET CU</p> <p>CU The default voltage is CV</p> <p>CC The default current is CC</p> <p>OFF No action</p>

CC/CV NC DC regulated power supply

output current: 0.0--20.00A

Fixed voltage output: 5V | 9V | 12V | 24V | 36V | 48V | 60V



Set the output voltage through the DIP switch

Supports the standard MODBUS protocol for serial communication

Solid material, input common mode inductor, Greatly reduce the influence of the input power wave, To achieve low wave output

Intelligent temperature-controlled fan
Large area heat sink

Positive input terminal VIN+
Negative input terminal VIN-

Power supply switch
(Hard switch ON: power on OFF: power off)

Serial port communication port

Positive OUT+ output pole

Negative OUT- output pole

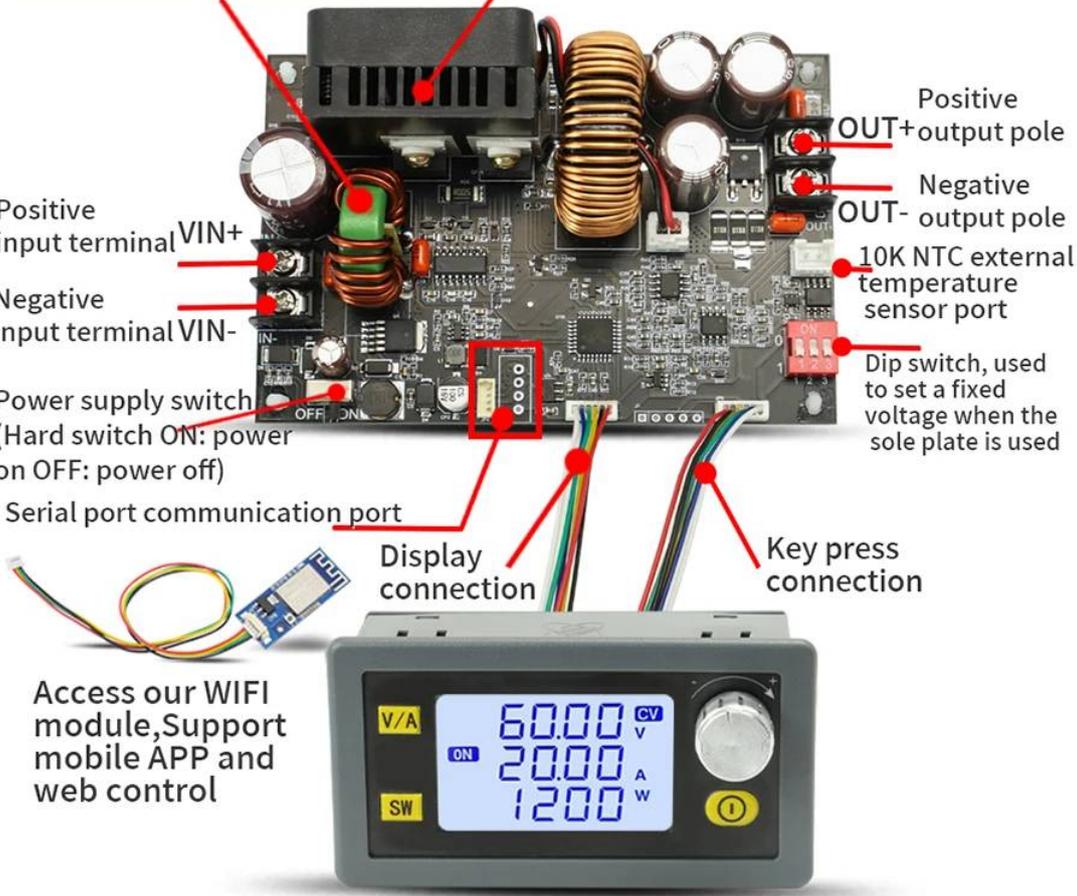
10K NTC external temperature sensor port

Dip switch, used to set a fixed voltage when the sole plate is used

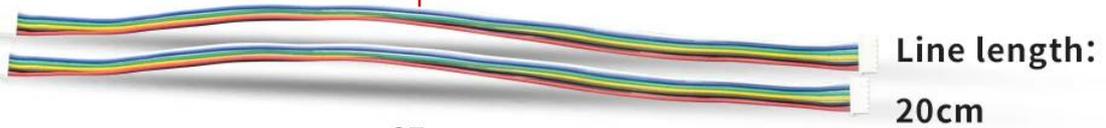
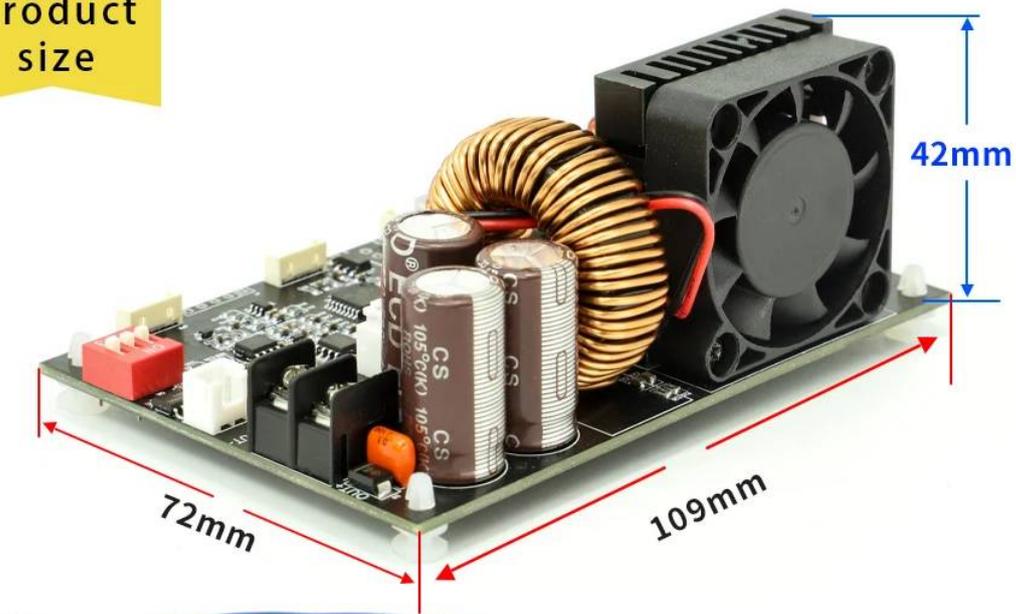
Display connection

Key press connection

Access our WIFI module, Support mobile APP and web control

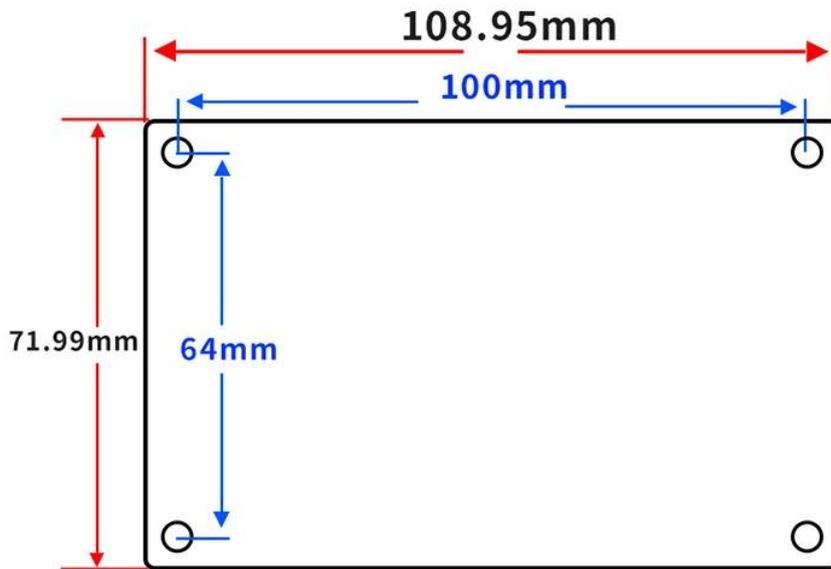


product size



Product Weight:
Base plate 183g+ head module 43g
+ wire 2g×2= 230g in total

Installation opening size diagram



The suggested opening size is shown below:

