

XY-6020 1200W 20A CVCC Buck Power Supply Adapter

1.Description:

XY-6020 is a DC-DC 20A 1200W High Power CVCC Adjustable Automatic Buck Power Supply adapter with a 1.8inch LCD display screen and remote controller. It is a non-isolated converter which supports solar charging. It can convert DC 6V-70V to DC 0.0V-60V power supply and can provide stable output. It can be used as ordinary buck power supply module, battery/solar charger or LED constant current drive and so on.

Its main function is output voltage as a constant voltage constant current source. It can be used to test the discharge time and discharge capacitance of the input voltage.

2.Features:

1>.1200W High Power: It adopts digital control technology to obtain stable output power supply. Up to 1200W output power which can meet the vast majority of needs. Input DC 6V-70V and max output 60V/20A equipped with aluminum heat sink and fan.

2>.Solar Charging: It can output a stable voltage value when the input voltage changes which is very suitable for solar energy systems such as solar charging, solar power supply, solar voltage conversion. Also it can display internal/external temperature in Celsius or Fahrenheit.

3>.Adjust CVCC: Constant voltage and constant current can not only stabilize the voltage, but also set the limit output current value to meet the current demand of the load. At the same time, it can also protect the load to avoid entering the over-current state.

4>.Remote Control: It can adjust and set various parameters using its built-in pots and buttons, and can also be controlled through a remote control.Faster parameter setting.

5>.Larger HD 1.8inch LCD display screen: It adopts an upgraded full view large screen, which can display multiple parameters and working status at the same time.Experience more fluency.

6>.Programmable Multi Parameter: It can set/display output voltage/current/power,work time, output electric energy, output capacity, input voltage and ON/OUT/CV/CC work status.You can also set default output state after power on.

7>.Multiple Protection Mechanisms: Under-voltage, over-voltage, over-current, over-power protection, over-temperature, over-capacity, over-energy protection, timeout-protection and so on.

3.Functions:

- 1>.Max 1200W/20A Output Voltage
- 2>.Larger HD Full View 1.8inch LCD Display Screen
- 3>.Adjust CVCC Control Output
- 4>.DC 6V-70V Wide Range Input Voltage
- 5>.DC 0V-60V Wide Range Output Voltage
- 6>.Solar Charging Control
- 7>.Remote Control
- 8>.UART PC Soft Control
- 9>.10 sets output preset function
- 10>.Display output voltage/current/power
- 11>.Display Internal and external temperature in Celsius or Fahrenheit
- 12>.Display time/energy/capacity
- 13>.Display Multiple Parameters Simultaneously
- 14>.Display input voltage, ON/OUT/CV/CC work status
- 15>.10 working protection modes
- 16>.Power-down Memory Function
- 17>.Power-down Saving Work Mode
- 18>.Parameter locking to avoid misoperation
- 19>.Automatic control cooling fan

4.Parameters:

- 1>.Work Voltage:DC 6V-70V
- 2>.Output Voltage: DC 0V-60V
- 3>.Output Current: 0~20A
- 4>.Output Power: 1200W(Max)
- 5>.Max Output Voltage: (IN-volt/1.1)-2
- 6>.Output Ripple Value:100mV VPP

- 7>.Voltage Display Resolution:0.01V
- 8>.Current Display Resolution:0.01A
- 9>.Conversion efficiency:About 90%
- 10>.Input Under-voltage Protection:Yes(4.8V-71V adjustable, default 4.8V)
- 11>.Output over-voltage Protection:Yes(0V-65V adjustable, default 65V)
- 12>.Output over-current Protection:Yes(0A-22A adjustable, default 22A)
- 13>.Output over-power Protection:Yes(0W-1250W adjustable, default 1250W)
- 14>.OnBoard Over-temperature Protection:Yes(60-110℃ adjustable, default 100℃)
- 15>.Timeout Protection:Yes(0-1000H adjustable, default OFF)
- 16>.Over-capacity Protection:Yes(0-999.99AH adjustable, default OFF)
- 17>.Over-energy Protection:Yes(0-9999.9WH adjustable, default OFF)
- 18>.Work Temperature:-20℃~85℃
- 19>.Work Humidity:10%~85%RH
- 20>.Adapter Size:125*55*56mm
- 21>.Controller Size:90*42*12mm

5.Note:

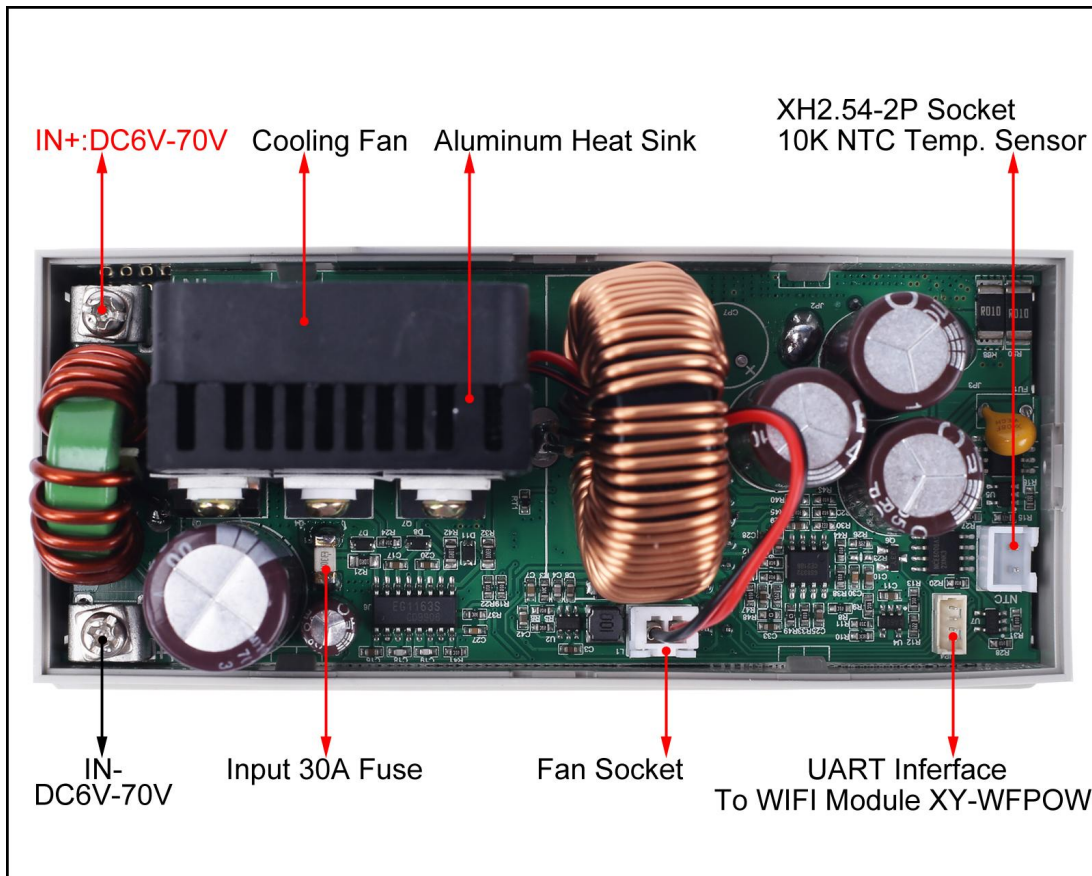
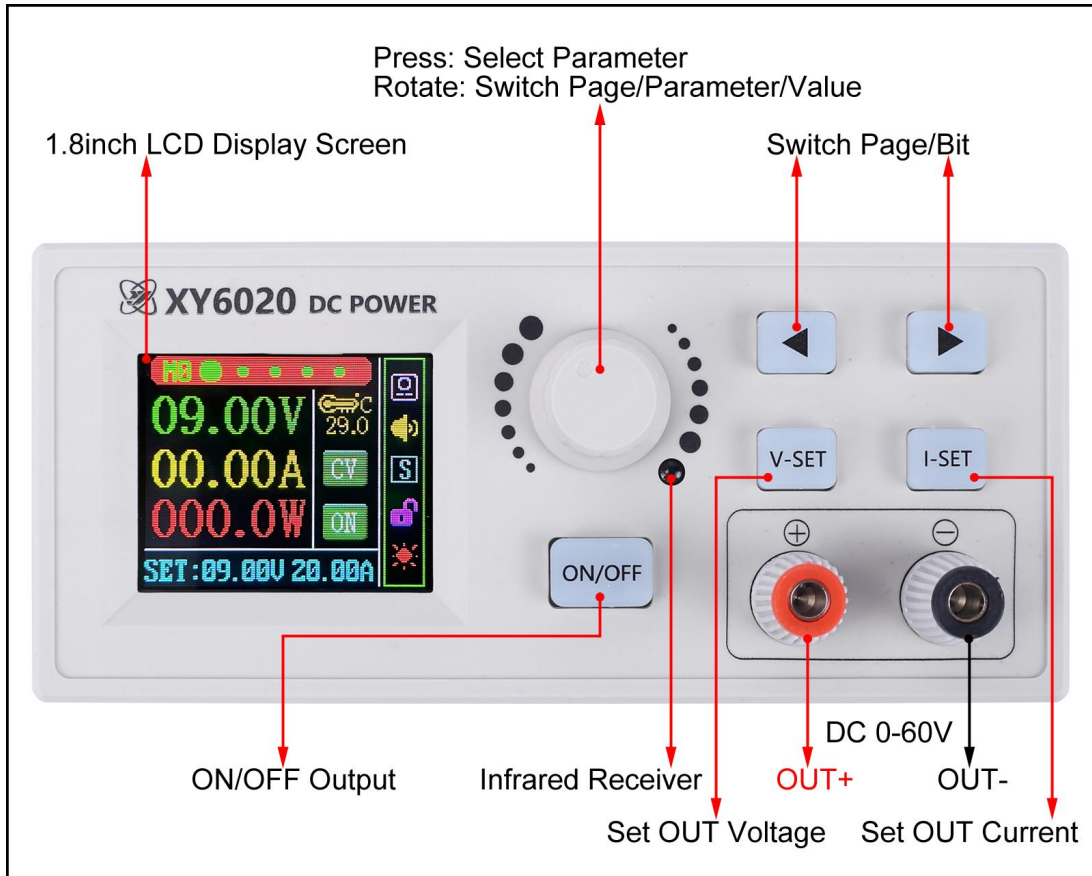
- 1>.It is a DC power module,So it can not connect to AC power.
- 3>.It is a step down power supply, so the output voltage must be less than the input voltage.
- 4>.The maximum output voltage is $(IN-volt/1.1)-2$, that means the maximum output is $44/1.1-2=38V$ if the input voltage is 44V. So the set output voltage can not more then 38V.
- 5>.Please connect input before connect battery when use as charge and make sure output voltage is higher than battery voltage.
- 6>.Please make sure input power is more than load power.
- 7>.Please step down output power if module is hot.
- 8>.Please read use manual and description before use.

6.Application:

- 1>.High-power LED constant current drive
- 2>.Lithium battery charging
- 3>.Ni-Cd or Ni-MH battery charging
- 4>.Solar panel
- 5>.Wind Turbines
- 6>.Ordinary power supply
- 7>.Instrument voltage display
- 8>.Test meter
- 9>.Circuit test
- 10>.Power conversion

7.Package:

- 1>.1pcs XY-6020 1200W 20A CVCC Buck Power Supply Driver Adapter
- 2>.1pcs Remote Controller
- 3>.1pcs NTC Temperature Sensor
- 4>.1pcs 20cm 4Pin 1.25mm to XH2.54-4P Wire



Multiple Protection Function

Data Quick Output

M0

M1

...

M9

Unit: C or F

External Temp.
w/ Background

Output Indicator

ON Turn ON

OFF Turn OFF

Status Indicator

- CV Constant Voltage Status Indicator
- CC Constant Current Status Indicator
- OTP Normal Status Indicator
- OVP Over-Voltage Indicator
- OCP Over-Current Indicator
- LVP Under-Voltage Indicator
- OPP Over-Power Indicator
- OHP Over-Time Indicator
- OAH Over-Capacity Indicator
- OWH Over-Energy Indicator

Multiple Display Pages

Data Group Menu Temperature CVCC Indicator

Output Voltage

Output Current

Output Power

Remote Indicator

Buzzer Indicator

Shift Key Indicator

Locked Indicator

Sleep Indicator

Set Output Voltage Value

Set Output Current Value

ON/OFF Indicator

Main Display Interface

Statistics Interface

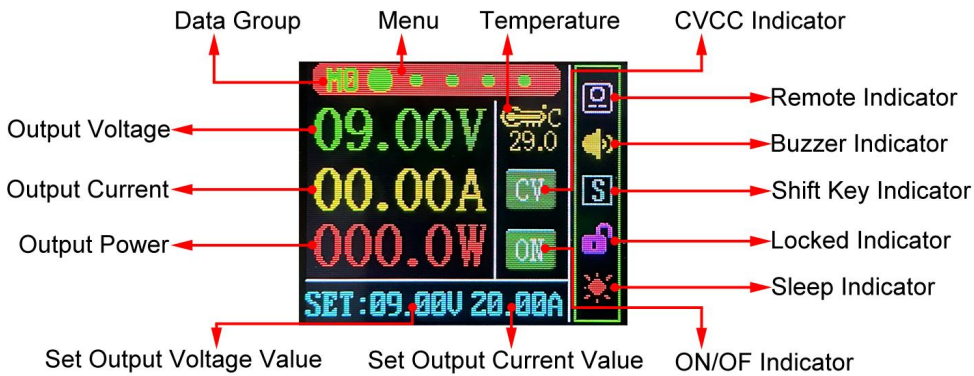
Voltage & Current Graph

Parameter Settings

Parameter Settings

System Setting Interface

Multiple Display Pages



Set Output Voltage/Current:

Method-1:

1. Press V-SET/I-SET button to set output voltage/current value.
2. Press left/right buttons to select parameter bit.
3. Rotate potentiometer to modify parameter values.
4. Press V-SET/I-SET button again to save and exit.

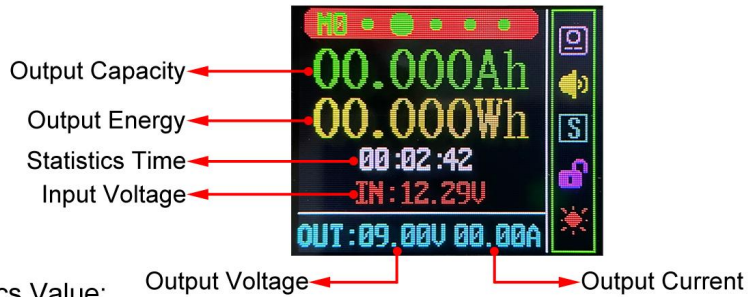
Method-2:

1. Press potentiometer to set output voltage/current value.
2. Press again to select parameter or bit.
3. Rotate potentiometer to modify parameter values.
4. Keep press 2second or no operate within 6s to save and exit.

Method-3:

1. Set parameter value by remote controller as following remote control operation instructions.

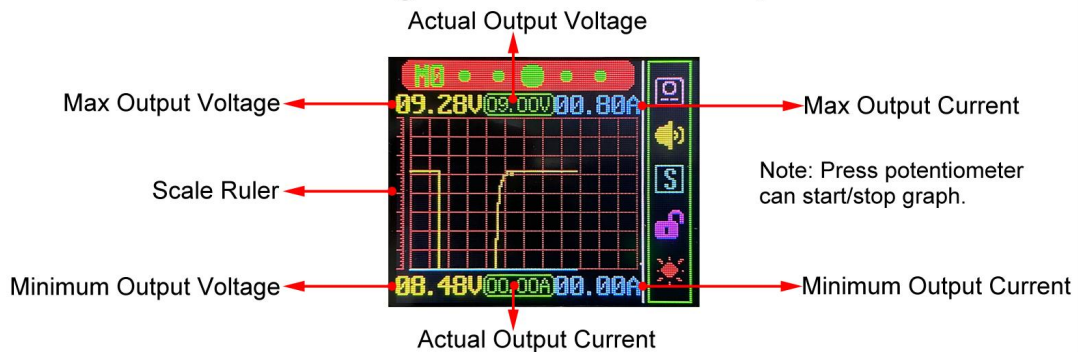
Statistics Display Interface



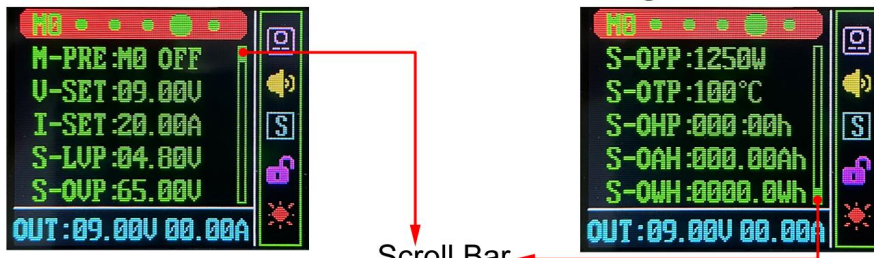
Clear Statistics Value:

1. Press potentiometer in the Statistics Interface to select statistics value.
2. Rotary potentiometer to switch selected parameter.
3. Press again to clear statistics value.

Voltage&Current Graph



Parameter Settings



- M-PRE: Select data group M0-M9 and default ON/OFF.
- U-SET: Set output voltage value for selected data group such as for M0.
- I-SET: Set output current value for selected data group.
- S-LVP: Set under-voltage protection value for selected data group.
- S-OVP: Set over-voltage protection value for selected data group.
- S-OCP: Set over-current protection value for selected data group.
- S-OPP: Set over-power protection value for selected data group.
- S-OTP: Set over-temperature protection value for selected data group.
- S-OHP: Set maximum output time for selected data group. Default 0 and OFF.
- S-OAH: Set maximum output capacity for selected data group. Default 0 and OFF.
- S-OWH: Set maximum output energy for selected data group. Default 0 and OFF.

Set Method:

1. Press potentiometer to select parameter in Parameter Settings Interface.
2. Press potentiometer again to select parameter value.
3. Rotate the potentiometer to set the parameter value.
4. Rotate potentiometer to switch parameter when selected item option
5. Keep press potentiometer about 3second to save parameters and exit.

Read/Use Data Group Parameter:

1. Keep press V-SET/I-SET button 2second in the main interface to read data group.
2. Rotate potentiometer to switch M1~M9.
3. Press potentiometer to use selected data group or cancel by keep press V-SET/I-SET button.

System Setting Interface

Internal Temp. External Temperature Calibration w/Background Color

Brightness: BL1~BL5

Temp. Unit: °C or °F

Ext. Tempe. ON/OFF

ON/OFF Key Sound

Device Address: 001~255

Sleep Time: 0~9
0: Screen keep ON.
1~9: OFF after 1~9 minutes.

Calibration Temp. -10.0~10.0

Ext. Temp. Protection Value

ON/OFF Remote Control

Set Baud Rate:
9600/14400/19200/38400/
56000/57600/115200

Zero Calibration

Menu Background

Voltage Font Color

Power Font Color

Screensaver
Not available

Restore Factory Settings

Menu Font Color: 0~7




Current Font Color

Status Bar Font Color

ON/OFF Boot Animation

Zero Calibration or Restore Factory Settings:

1. Rotary potentiometer into set status when Y/N was selected
2. Rotary again to switch YES or NO for Zero Calibration or Restore Factory Settings.
3. Press potentiometer to Zero Calibration or Restore Factory Settings

	Turn ON or OFF output.	 <h3>Remote Controller</h3> <p>Note: 1. The  label on the right will be highlighted when the  button is pressed.</p>
	Delete and return button.	
	Set output voltage.	
	Set output constant current value.	
	Confirm or select button.	
	Multi-function button and it needs to be used with other buttons.	
	Switch pages, shift left and right, switch up and down.	
	Input value. E.g. Set output voltage by press and then press and last press to set output voltage at 12.5V.	
	Switch LCD display direction.	
	Quick pairing only for WIFI version.	
	Turn ON or OFF buzzer sound.	
	Switch temperature display unit °F and °C	
	Set backlight brightness.	
	Set sleep time for 0~9 minutes.	
	Lock/unlock buttons and potentiometer. Parameters can not be set at lock status.	
	Quickly switch M0~M9 data.	

