

## Product Description:

The numerical control power supply module integrates analog integration and numerical control in one. The module owns 0-50.00V wide-range adjustable output voltage, stepping 0.01V; 0-5.000A adjustable output current, stepping 0.001A. This module has power-down preset value storage function, which can store 10 groups preset value and can quickly extract two groups stored value. Coming with the function of voltmeter and ammeter, it is very convenient for you to check the preset voltage/current, the input/output voltage/current, output power, etc through the bright and clear LCD display. In the output state prompt area, it's easy for you to check whether output turns on/off or not, whether the output is in the state of constant voltage or constant current, whether the output is normal or not, whether the key is locked or not, and the data groups that is being used at present. In the data setting interface, you can adjust the value of over-voltage, over-current, over-power, data set and LCD brightness. small size, advanced function, good visual effect, high operability and high precision, this power supply can be used independently or be inset into device, wide application.

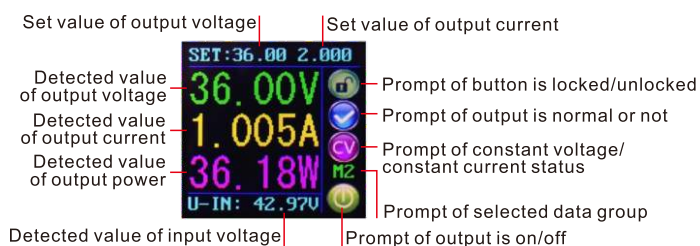
## Technical Parameters:

- Input voltage range: DC6-55V
- Output voltage range: DC 0-50.00V
- Output current range: 0-5.000A
- Output power range: 0-250.0W
- Output voltage resolution: 0.01V
- Output current resolution: 0.001A
- Output voltage measurement accuracy:  $\pm(0.5\% + 1 \text{ digit})$
- Output current measurement accuracy:  $\pm(0.5\% + 2 \text{ digits})$
- Product dimension: 79mm x 43mm x 48mm
- Open size: 71mm x 39mm
- Product weight: 78g
- Note: You must make sure that power supply input voltage must be 1.1 times more than the output.

## Panel Description:



## Display Interface Description:



The Main Interface



Data Setting Interface

## Connection Description:

- IN+: input positive      OUT+: output positive
- IN-: input negative      OUT-: output negative

### Note:

- The input voltage range is DC 6-55V and 55V is the maximum voltage, please leave room for usage, or the module will be burnt.
- DC input, cannot use AC 220V to directly supply power, or else the module will also be burnt.
- Although this module has input reverse polarity protection and output short-circuit protection, you must connect in strict accordance with connection description to. If you connect power supply to the output terminal, this module may be burnt.

## Operating Instruction:

- After powering up, the welcome window will come up firstly, then enter into main interface. In the main interface, the set output voltage and current are displayed at the top of the screen. The current actual output voltage, current and power are displayed on the left of the screen. The input voltage is displayed at the bottom of the screen. The sidebar on the right of the screen shows the running status sign of the module, including the lock of the button, the sign of abnormal output, the sign of constant voltage (CV)/constant current(CC), the prompt of selected data group, the sign of output is on/off.



### Fast set the output voltage & current in the main interface

- Short press **SET** once to enter into data setting status, then press the coding potentiometer which can cyclical switch the selected digit of voltage and current one by one. When the digit is selected, rotating the potentiometer can change the numerical value, clockwise rotation to increase, counterclockwise rotation to decrease. After finishing the adjustment, press **SET** to store the current set value and exit from setting, or if there is no more operation, the value will be stored and exit automatically.

### Setting the values in the data setting interface

- In the interface, continuously press **SET** twice to enter into data setting interface. In the data setting interface, short press **M1** or **M2** to move to U-SET, I-SET, then you can set the output voltage and current. The setting method is the same as the one in the main interface. Setting the protection value.
- Move down to S-OVP, S-OCP, S-OPP and then short press coding potentiometer to enter into setting. Rotate the coding potentiometer to set the value to the desired value, then short press **SET** to exit form setting.



### Adjust the brightness of screen

- Move down to B-LED and then short press coding potentiometer to enter into setting. Rotate the coding potentiometer to set the value to the desired value, then short press **SET** to exit form setting. There are 6 levels of the brightness of the backlight, level 0 to level 5, level 0 is the darkest and level 5 is the brightest.

### Setting data and storing it into specified data group

- Move to M-PRE and then short press coding potentiometer to enter into selecting the ordinal value of the data group. Rotate the coding potentiometer to choose the data group you want to check. At this point, all the set values of this data group will be displayed. Short press the coding potentiometer again to enter into the output control of the extracted data. Rotate the coding potentiometer to choose ON/OFF. Choosing ON means the data group is extracted and the output status remain the same; choosing OFF means the data group is extracted but no output. Short press **M1** or **M2** to move to other options and short press coding potentiometer to enter into setting. After finish adjusting all the values, long press **SET** for more than 2 seconds, all the values will be stored into specified data group. Meanwhile, the sidebar on the right will prompt the ordinal value of the stored data group, then short press **SET** again to exit.

## Function Description:

### Turn on/off output

- In any interface, short pressing **ON/OFF** can turn on or turn off the output.

### Lock the buttons to avoid faulty operation

- In any interface, long press coding potentiometer for more than 2 seconds, then can lock the buttons. At this point, there will be a prompt of locking on the right of the screen. Long pressing coding potentiometer again can unlock the button. There also will be a prompt of unlocking on the right of the screen.

### Built-in M0-M9 10 data groups

- Group 0 is the default data group applied when power on. The extracted data group by manual operation will cover the values of Group 0 and will be stored into Group 0 automatically.
- In the interface, long press **M1** or **M2** for more than 2s, then corresponding data group can be extracted. Meanwhile, the ordinal value of the corresponding data group will be displayed on the right of the screen.

### Extracting specified data group:

- In the interface, long press **SET** for more than 2s, the sidebar on the right of the screen will prompt the ordinal value of the data group. You can rotate the coding potentiometer to move to the ordinal value of the data group, then short press **SET** to extract the value of the data group.