DC5005LCNC DC adjustable power supply

Product Manual

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1 product description

DC5005L programmable digital controlled step-down adjustable power supply is small in size, stable in performance, high in accuracy and high in efficiency, and contains a variety of humanized system settings. Adopting 1.44-inch LCD high-definition display, one screen displays a variety of data, the page is simple and rich.

2 Parameter Description

2.1 Basic parameters

1. Input voltage: 8V-55V;
2. The output voltage: 1.8-50V(Note: Ensure that the input voltage is greater than 1.1 times the output voltage)
3. Output current: 0-5A;
4. Output Power: 0-250W;
5. Voltage resolution: 0.01V, Accuracy: ±0.3%+3 words;
6. Electric current Resolution: 0.001A, Accuracy: ±0.5%+5 words.

2.2 Protection mechanism parameters

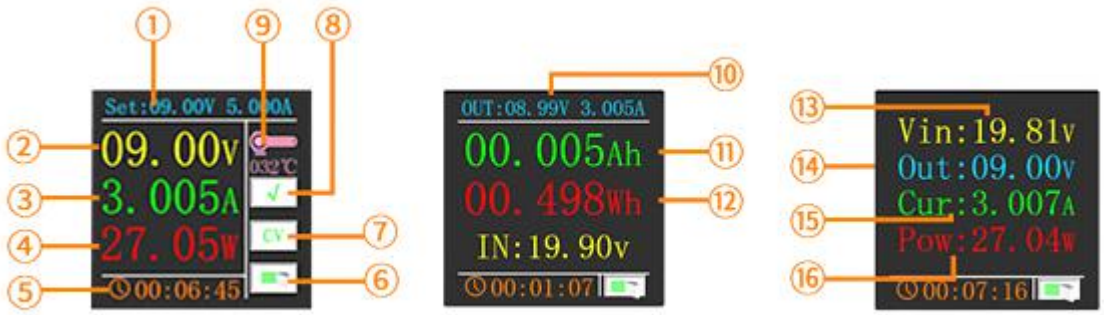
1. Input anti-reverse connection, output anti-short connection and anti-backflow, can charge the battery (distinguish positive and negative)
2. Output overvoltage protection (OVP): 1.8-51V custom adjustment,

default 51V;

3. Output overcurrent protection (OCP): 0-5.1A custom adjustment, the default is 5.1A;
4. Output over power protection (OPP): 0-250W custom adjustment, default 250W;
5. Output over temperature protection (OTP): 45-120℃ self-defined adjustment, closed by default;
6. Output overtime protection (OHP): 0-100h custom adjustment, closed by default;
7. Power-on default (ACQ): closed by default;

3 Features Introduction

3.1 Interface display diagram



description:

① Digitally set voltage and current; ② Output voltage; ③ Output current; ④ Output power; ⑤ Running time; ⑥ Switch indicator; ⑦ CC/CV constant current and constant voltage display; ⑧ √: Normal output status, if the software protection is triggered, the protection type will be displayed, OVP/OCP/OPP/OTP/OHP; ⑨ temperature display; ⑩ output parameters: voltage, current; ⑪ output power; ⑫ output energy; ⑬ input voltage value; ⑭ output voltage value; ⑮ output current value; ⑯ output power value;

3.2 Parameter setting description

3.2.1 System settings

1. Default Switch：Set the power-on device to turn on or turn off the output by default;
2. Language：Set English and Chinese switching;
3. Brightness：Support display brightness adjustment;
4. Direction：Set the direction of four-way rotation;
5. Temp Unit：Set the temperature unit (℃ or ℉).

3.2.2 Software protection settings

During the operation of the equipment, once the software protection mechanism is triggered, the output of the equipment is disconnected and the buzzer will beep for a long time, and the corresponding mechanism code will be alarmed. Press the switch key and the knob again to release the alarm and return to the normal state.

1. Over Voltage： Set the threshold voltage, and alarm OVP when the output voltage exceeds the set voltage;
2. Over Current： Set the threshold current, and alarm OCP when the output current exceeds the set current;
3. Over Power：Set the threshold power, and alarm OPP when the output power exceeds the set power;
4. Over Temp： Set the threshold temperature, and alarm OTP when the device temperature exceeds the set temperature
5. Timeout：Set the threshold time, when the output time exceeds the set time, it will alarm OHP;

4 Key Description

Switch button:

On any page, short press the power switch, and long press to enter the waveform page (in the software protection alarm state, short press reset);

Coding button: rotate left or right to realize page turning or adjustment function;

Main page： short press the timer to clear it, long press to enter the state of setting output voltage and current (in this state, short press to adjust the output voltage and current by bit);

Battery display page: Long press to switch to the value of clear 0, the corresponding font color will turn white (power, energy, timing), short press to clear 0;

Settings page: short press to enter the setting options, and adjust the specified setting item by rotating the button (the corresponding option will turn yellow at this time), long press to enter the specific setting of this option, and long press again to exit the specific setting (when exiting, it will Automatically save the set values) Short press again to exit the setting options;

Waveform interface: Press and hold to switch the output voltage and current waveform interface.