

Mini DC Power Supply User Manual

I. Overview

This compact DC regulated power supply delivers premium quality and exceptional stability at an affordable price. Featuring LED four-digit voltage and current display, it provides five critical safeguards: Overvoltage Protection (OVP), Overcurrent Protection (OCP), Overtemperature Protection (OTP), Overload Protection (OPP), and Short Circuit Protection. With its exceptional stability and rock-solid reliability, this power supply is the go-to solution for academic institutions, industrial production lines, and home appliance repair shops.

II. Product Specifications

Specifications (rated)	Output voltage (0-U _{max})	Output current (0-I _{max})	Output power (0-P _{max})
15V/2A	0-15V	0-2A	0-30W
15V/5A	0-15V	0-5A	0-75W
15V/20A	0-15V	0-20A	0-300W
30V/5A	0-30V	0-5A	0-150W
30V/10A	0-30V	0-10A	0-300W
60V/5A	0-60V	0-5A	0-300W
100V/3A	0-100V	0-3A	0-300W
150V/2A	0-150V	0-2A	0-300W

III. Technical Parameters

1.Rated Working Conditions

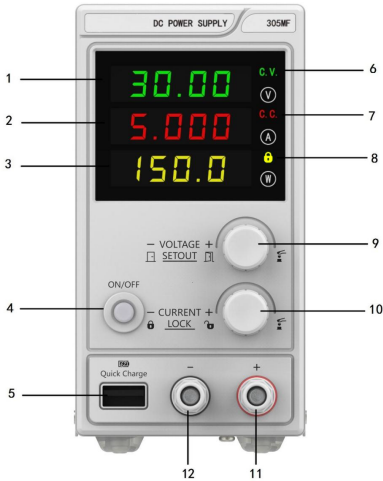
Working voltage: AC220V±10% 50Hz (optional AC110V±10% 60Hz)
Working conditions: temperature 0-40℃ relative humidity: ≤80%RH
Storage conditions: temperature-20-60℃ relative humidity: ≤80%RH
Temperature range to ensure accuracy: 23℃±5℃

2.Specifications

Specifications	15V/2A	15V/5A	15V/20A	30V/5A	30V/10A	60V/5A	100V/3A	150V/2A
Voltage								
Set resolution	<100V: 10mV; ≥100V: 0.1V							
Set precision	≤0.1%+5digits							
Reading resolution	<100V: 10mV; ≥100V: 0.1V							
Readubg precision	≤0.1%+5digits							
Temperature coefficient	≤0.02%+3mV							
Ripple	≤10Vrms					≤15Vrms	≤18Vrms	≤20Vrms
Current								
Set resolution	<10A: 1mA; ≥10A: 10mA							
Set precision	≤0.2%+10digits							
Reading resolution	<10A: 1mA; ≥10A: 10mA							
Reading precision	≤0.2%+10digits							
Temperature coefficient	≤0.02%+3mA							
Ripple	≤10Arms					≤15Arms	≤18Arms	≤20Arms
Load regulation								
Line Regulation	<10A: ≤0.1%U _{max} +5mV; ≥10A: ≤0.2%U _{max} +5mV							
Maximum voltage	15.5V	15.5V	15.5V	32V	32V	64V	102V	150.5V
Maximum current	2.1A	5.1A	20.1A	5.1A	10.1A	5.1A	3.1A	2.1A
Cooling Mode	Air cooling							
Weight	About 2.0 KG							
Bare Machine Dimensions	230*80*150 (MM)							

IV. Panel Features

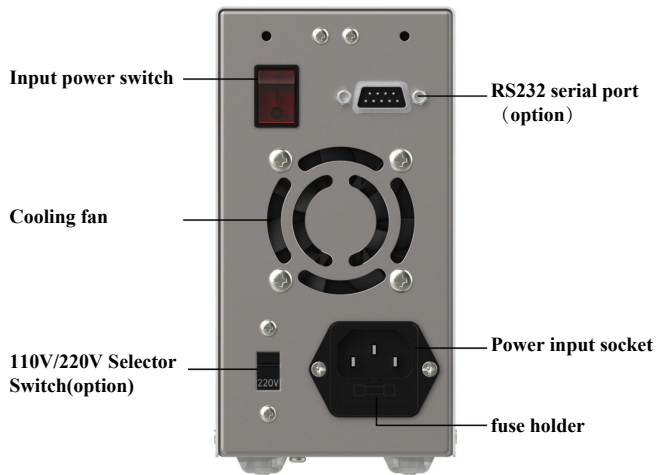
Front panel



- Voltage value display** : display the preset voltage value in standby state; display the actual output voltage value when the output is open. Unit: volts (V).
- Current value display** : displays the preset current value in standby state; shows the actual output current value when the output is on. Unit: amp (A).
- Power value display** :displays the output power value (the product of the output voltage value and the current value). Unit: watt (W).
- ON/OFF button** : short press can switch the output state of the power supply. The color is bright red in standby state and bright green in output state.
- USB charging output interface**: QC18W (5V-3A,9V-2A,12V-1.5A).

- Constant Voltage (CV) Indicator** : This light is lit in the stable voltage working state, bright green.
- Constant Current (CC) Indicator** : This light is lit in the stable current working state, bright green.
- The keyboard lock indicator** : Long press the current knob to lock or unlock the function. The yellow indicator light is locked. In the locked state of the key, only ON/OFF keys are valid.
- Voltage Adjustment Knob**: Short-pressing the knob activates voltage adjustment mode. In this mode, short-pressing the knob moves the editing position (shown in flashing lights). Turning it clockwise increases voltage, while counterclockwise decreases it. Long-pressing the knob saves the current output status as the initial settings after each power-on, taking effect immediately.
- Current adjustment knob**: Short press the knob to enter the current setting mode. In setting mode, short press the knob to move the editing position (flashing display). Rotate clockwise to increase the current, and rotate counterclockwise to decrease the current. Long press the knob to select unlock or lock voltage and current adjustment knobs, which will take effect immediately.
- Positive output terminal** (red)
- Output terminal negative** (black)

Back panel



V. Instructions for Use and Protective Measures

- When the power switch is in the off state, connect the power cord attached to this power supply. The "L" end of the power cord plug should be connected to the live wire of the power supply, and the grounding wire in the power cord should be well connected to the ground.
- Power supply must be grounded.
- Attention should be paid to ventilation when using this power supply. There should be a gap of 10cm between the top, bottom, left and right and other objects to ensure smooth ventilation. Do not expose the power supply to dust, corrosive gas and other harmful substances.
- The technical index measurement of this power supply should be carried out after 15 minutes of preheating.
- Check whether the power input switch is compatible with the mains power before power on, otherwise serious faults may occur.

VI. Packing List

- Power supply*1
- Power line*1
- User manual*1
- Test line*1
- Serial communication cable (optional)

VII.Maintenance

- The input alternating voltage is normal, and the digital display window is not displayed after the power on. It may be due to the fuse being burned out or other faults. Disconnect the power switch, unplug the power cord, replace the fuse or ask a professional to check.
- When the power supply is used as a voltage regulator, if the output voltage is less than the predetermined value and the CC light is on, the output is limited current. The power supply automatically switches to the steady flow working state. At this time, the load should be checked or the set current value should be increased according to the use (turn the current knob clockwise).
- When the power supply is used as a steady current source, if the output current is less than the predetermined value and the CV light is on, the voltage output is limited. The power supply automatically switches to the steady voltage working state. At this time, the load should be checked or the set voltage value should be increased according to the use (turn the voltage knob clockwise).
- If the fault is serious and cannot be solved, please contact the dealer or our company.

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Certificate of Qualification/guarantee Card

[Detailsof after-sales service]

1. Free upgrade of software version. Free replacement and maintenance for quality problems caused by design, manufacturing and installation process, materials, etc.
2. Any damage caused by force majeure (such as flood, fire, earthquake, war, etc.) and user's human factors (such as construction, cleaning and other unintentional human factors) shall be settled by both parties through coordination.
3. "One year warranty, lifetime maintenance", after the end of the warranty period, the system will be maintained for life, and only the material cost will be charged for replacing accessories.
4. The Company shall not be liable for any other loss arising from the use.
5. Free warranty service is available for 12 months (excluding accessories), and the freight will be paid by the sender (only for mainland customers).
6. The following conditions are not covered by the warranty:
 - (1) The internal circuit of the power supply is damaged due to the harsh environment (such as electroplating and other highly corrosive environments).
 - (2) The product has been repaired or modified by non-company technicians or non-company approved service stations.
 - (3) The product has been damaged by misoperation, negligent use and other incidents.
 - (4) Do not operate or maintain according to the instructions provided by the original factory.
 - (5) This product has been discontinued for five years or more.

product certificate	
specifications and models	
identification of product	
date of manufacture	
Inspector	
This product is approved for delivery after passing the inspection and meeting the prescribed quality standards	

warranty card	
product model	
date of purchase	
Vendors	
customer name	
Customer address	
Customer phone	
Fault description	
Note: This card is the product warranty certificate, please be sure to keep it properly	