

MPS-D+ Series

Single-channel Adjustable DC Power Supply

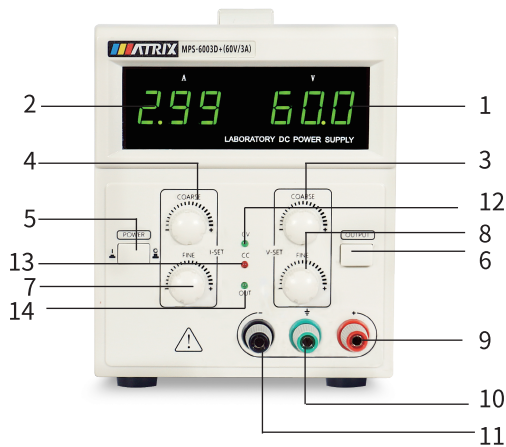
User Manual

I Overview

MPS D+ series single-channel adjustable DC power supply is an economical linear DC power supply with high quality and high stability, which is widely used in laboratory, school and production line. In each gear, the output voltage and current can be adjusted continuously through coarse and fine tune within measure range. The output voltage value and output current value can be read accurately and respectively on the display window. With a modern circuit design, this instrument can be used as a stable voltage source, also a stable current source.

II Panel Features

1. Front panel



1. Voltage display window (the output ON status displays the actual output voltage value, and the OFF state displays the voltage set value).
2. Current display window (the output ON status displays the actual output current value, and the OFF state displays the current set value).
3. Coarse voltage knob.
4. Coarse current knob.
5. Power ON/OFF.
6. Adjustable DC power supply output switch.
7. Fine-tuning Current knob.
8. Fine-tuning Voltage knob.
9. Positive output terminal (Red).
10. Ground terminal GND (Green): This terminal is connected to the chassis and to the ground wire of the power cord.
11. Negative output terminal (Black).
12. CV voltage stabilizing work indicator: this light will be on under the voltage stable working state.
13. CC current stabilizing work indicator: this light will be on under the current stable working state.
14. Output status indicator, the light will be on when the adjustable DC

2. Rear panel



1. Cooling fan
2. Input voltage switch button
3. Bar code
4. Socket
5. Fuse

III. Using instruction and protection measures

1. Set POWER switch in off state, plug in the power cord, make sure the power cord L end connect to the fire cord of the power socket, and the grounding wire should be well connected to the earth.
2. MPS D+ series single-channel adjustable DC power supply must be grounded.
3. Pay attention to ventilation when using this power supply. The gap between upper, lower, left, right and other objects should be maintained at 10cm distance to ensure smooth ventilation. Do not expose this power supply to dusty, corrosive gases and other hazardous substances.

4. The measurement of the technical parameter of this power supply should be conducted after starting up for 15 minutes.
5. Check whether the power supply voltage input conversion switch is in line with the mains before power on, otherwise it will cause serious failure.

IV. Package listing

1. MPS D+ Single-channel adjustable DC power supply *1pc
2. Power cord *1pc
3. User manual *1pc
4. Testing lead*1pair

V. Maintenance

1. When the power supply voltage is normal, the digital display meter does not light up after starting up, the fuse can be blown down or there is other fault. Disconnect the power switch, unplug the cord, replace the fuse or ask a professional person to check.
2. When the power supply is used, the output current is greater than the preset value and the CC light is on, which it's under over current protection(OCP). The unit will automatically switches to the steady current working status. At this time, you may check the load or max the current according to the using situation (Adjust the current potentiometer 4 or 7 clockwise).
3. When the power supply is used in a steady current, the output current is less than the preset value and the CV light is on, which it's under over voltage protection(OVP) The unit automatically switches to the steady voltage working state. At this time, check the load or max the Voltage according to the using situation(Adjust the voltage potentiometer 3 or 8 clockwise).
4. If the problem can't be solved, please contact your local dealer or our sales.

VI. Parameter

Model		MPS-3003D+	MPS-3005D+	MPS-3010D+	MPS-6003D+	MPS-6005D+
Input feature						
Input voltage		AC 220V/110V±10% 50Hz/60Hz				
Fuse	220V AC	3.15A	5A	8A	5A	8A
	110V AC	5A	8A	12A	8A	12A
MAX.Input power		165W	275W	520W	325 W	520W
Rated output	Voltage	0-30V	0-30V	0-30V	0-60V	0-60V
	Current	0-3A	0-5A	0-10A	0-3A	0-5A
Load regulation rate	Voltage	<0.02%+5mV	<0.02%+6mV	<0.02%+10mV	<0.02%+5mV	<0.02%+6mV
	Current	<0.2%±1digits	<0.2%±1digits	<0.2%±1digits	<0.2%±1digits	<0.2%±1digits
Power regulation rate	Voltage	<0.02%+5mV	<0.02%+6mV	<0.02%+10mV	<0.02%+5mV	<0.02%+6mV
	Current	<0.2%±1digits	<0.2%±1digits	<0.2%±1digits	<0.2%±1digits	<0.2%±1digits
Display resolution		100mV/10mA				
Display accuracy		≤0.2%+2 digits(Environment temperature : 23°C±5°C)				
Ripple	Voltage	≤2mVrms	≤2mVrms	≤3mVrms	≤2mVrms	≤2mVrms
	Current	5mArms	5mArms	10mArms	5mArms	5mArms
Temperature coefficient		300ppm/°C				
Max. output voltage		31.5V±0.5V	31.5V±0.5V	31.5V±0.5V	61.5V±0.5V	61.5V±0.5V
Max. output current		3.15A±0.05A	5.20A±0.05A	10.1A±0.05A	3.15A±0.05A	5.20A±0.05A
Working condition		Temperature 0°C ~40 °CRelative humidity < 80%				
Storage condition		Temperature -15°C~70 °CRelative humidity < 80%				
Cooling method		Smart air cooling				
Size (WxHxD)	Net weight	280mm*130mm*160mm				
	Gross weight	4.9Kg	5.7Kg	7.0Kg	5.7Kg	7.0Kg
Weight		5.6Kg	6.4Kg	7.7Kg	6.4Kg	7.7Kg



MATRIX TECHNOLOGY INC.

Add : No. 206, Building D, Huachuangda Culture and Technology Industrial Park,
Haihui Road, 49 th Area, Bao'an District, Shenzhen, Guangdong, China

TEL.: 86-755-2836 4276

P.C.: 518102

E-mail:sales@szmatrix.com

http://www.szmatrix.com