

Power supply frontend DPS5020-USB 50V/20A with Bluetooth and USB interface



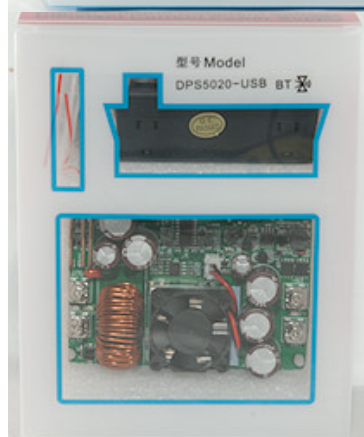
This device is the front end for a power supply, it must be supplied with low voltage DC power (Up to 60V).
Official specifications:

- Input voltage range: 6.00-60.00V
- Output voltage range: 0V-50.00V
- Output current: 0-20.00A
- Output power range: 0-1000W
- Product Weight: about 222g
- Display module size: 79*43*38(mm) (L*W*H)
- Cutout size: 71mm*39mm
- Power module size: 93*71*41(mm) (L*W*H)
- Length of connecting line: 200mm
- Fixed hole center distance: 86mm, 64mm
- Output voltage resolution: 0.01V
- Output current resolution: 0.01A
- Output Voltage accuracy: $\pm (0.5\% + 1 \text{ digit})$
- Output Current accuracy: $\pm (0.5\% + 2 \text{ digits})$

I got it from aliexpress store: RD official store



指标 Index	型号 Model	DP30V5A		DP50V5A		DPS3012	DPS8005	DPS5015	DPS5020	升降压 Buck-boost	
		DPS3003	DPS3005	DPS5005	DPS5005		DPS8005	DPS5015	DPS5020	DPH3205	DPH5005
			-USB	-USB	-USB		-USB	-USB	-USB		
输入电压范围 Input voltage		6-40.00V	6-40.00V	6-55.00V	6-40.00V		10-90.00V	6-60.00V	6-60.00V	6-40.00V	6-50.00V
输出电压范围 Output voltage		0-32.00V	0-32.00V	0-50.00V	0-32.00V		0-80.00V	0-50.00V	0-50.00V	0-32.00V	0-50.00V
输出电流范围 Output current		0-3.000A	0-5.000A	0-5.000A	0-12.00A		0-5.100A	0-15.00A	0-20.00A	0-5.000A	0-5.000A
输出功率范围 Output power		0-96.00W	0-160.0W	0-250.0W	0-384.0W		0-408.0W	0-750.0W	0-999.9W	0-160.0W	0-250.0W



It arrived in a styrofoam box together with some other stuff, inside the box was the plastic box with the electronic.



There is a control unit, a power unit, two flat cables, some rather small fork terminals, the usb interface, the Bluetooth interface, cable for usb/bluetooth and a manual in English and Chinese.

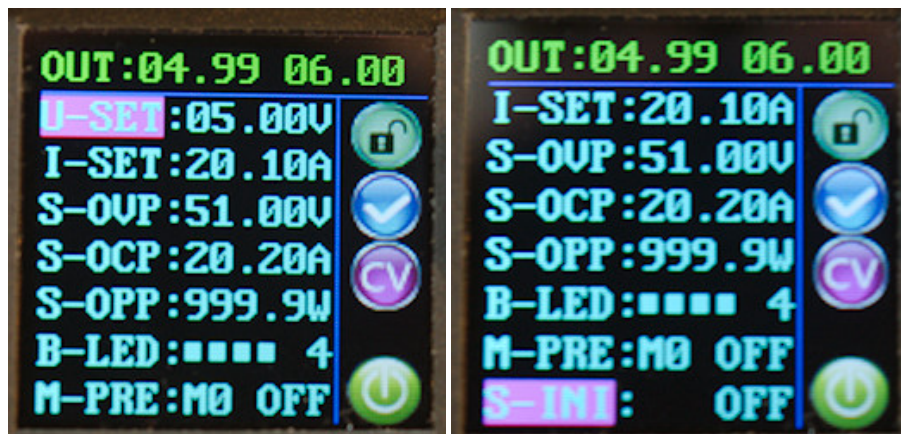


The control unit has a display, four buttons and a encoded that can be pressed.

The V and A buttons will enable adjustment of voltage and current with the encoder, press the encoder to select digit, when finished press SET. Holding down V/A/SET will recall a preset, with V and A it is preset 1 and 2, with SET any of the 9 presets can be selected.



Display while off and on, set point is shown at the top of the screen and input voltage at the bottom.



On the settings screen it is possible to define a couple of parameters: Voltage, current, over voltage, over current, over power, display brightness. The "over" settings will turn output off if they are reached.

The device has 9 preset memories. To save a preset adjust the parameters, move the marker to M0, adjust the encoder to desired preset number and hold down the SET button.



There is a hidden communication menu, hold down the "V" button while powering on the supply to activate it (Default is fine for most applications).



The front panel is made to be pushed into a rectangular cut-out



The two flat cables from the power unit is connected at the back.