# **GOPHERT NPS Series User Manual**

## I Function and Operation

### 1 Select the operating AC voltage

Set the switch where located at rear to 115 or 230 carefully according to the AC Mains! If the AC Mains is 100-120Vac, the switch should be set to 115, the default factory set is 230.

Warning: If the switch is set to 115, do not plug into 200V-240Vac Mains, otherwise the power supply will be damaged!

#### 2 Set Voltage

Press to let 'V' indicator light up, click the adjusting knob to select adjusting digit, and then adjust the knob to set the highlight digit.

#### 3 Set Current

Press to let 'A' indicator light up, click the adjusting knob to select adjusting digit, and then adjust the knob to set the highlight digit.

#### 4 Turn on or turn off output

When the output is turned off, the Amp Meter shows "OFF",

press button, the output turns on, press the button again the output turns off.

#### 5 Set the output ON at the AC power on

Press , the power indicator light up and the Amp Meter displays the output power for 3 seconds.

## **II** Protection

#### 1 Output short circuit protection

When the output is short circuit, the power supply works on C.C mode, the Amp Meter shows the short circuit current.

#### 2 Over Voltage Protection

Tracking over voltage protection, the OVP value is relevant to the setting voltage. When OVP is triggered, the output is shutdown,

the Amp Meter displays "OUP", click with to nover voltage problem has been resolved.

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to reset the OVP if the

#### **3** Over Current Protection

Tracking over current protection, the OCP value is relevant to the setting current. When the OCP is triggered, the output is

shutdown, the Amp Meter display "OCP", click voice to reset the OCP if the over current problem has been resolved.

#### 4 Over Temperature Protection

The MCU monitor the temperature of the power supply, if the temperature is higher than the special value, the output is shut

down; The Amp Meter displays "OTP", click the OTP if the temperature is lower.

button to reset

## **III** Application

#### 5.1 Series Connection

Several units can be connected in series in order to gain a higher total output voltage. To do so, the positive DC output of one unit is connected to the negative DC output of the next unit etc. The non-connected positive and negative of the last unit will be the positive and negative of the whole series output, and will have a higher voltage output.

- For safety and insulation, it is not allowed to connect an arbitrary number of units in series. The DC output of series system must not be raised higher than 500 V DC.
- If units with different nominal current are connected in series, the minimum nominal current of the products is the maximum current of the system.
- Only one negative DC output of the series system can be grounded.

#### 5.2 Parallel Connection

Several units which are preferably same type, but at least identical nominal output voltage, can be connected in parallel in order to gain a higher total output current. It is recommended to adjust the output current to the maximum and the output voltage to identical value on every unit.

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