■ 特性 Features:

- 全电压范围输入：90-264Vac
  Full range AC input voltage: 90-264Vac
- 内置主动式 PFC 功能
  Built-in active PFC function
- 效率高达 92.5%
  Efficiency up to 92.5%
- 输出低纹波噪声
  Low ripple & noise output
- 电源输出 LED 指示灯
  PSU output LED indicator
- 内置直流风扇强制风冷
  Built-in DC fan forced air cooling
- 输出短路、过流、过压、过温保护功能
  With OSP、OCP、OVP、OTP functions
- 输出电压和恒流值可调
  The output voltage and constant current value are adjustable
- 具有遥控开关/遥感功能/辅助电源/DC_OK 信号输出
  With remote ON-OFF/remote sensing function/Auxiliary power/DC_OK signal output
- 满足 5000M 海拔应用(备注 3)
  Meet 5000M altitude application (Note 3)
- 100%高温老化
  100% high temperature burn-in test
- 符合 IEC/EN/UL62368、GB4943、GB9254 等认证标准
  Comply with IEC/EN/UL62368, GB4943, GB9254 and EN62477 Etc.certification standards
- 输出双重过压保护
  Output double OVP
- 高可靠性，基板三防漆工艺
  High reliability, conformal coating process for substrates
- 固保期：5 年
  Warranty：5 Years

■ 应用 Applications:

- 工业控制或自动化装置
  Industrial control or automation devices
- 电子仪器，设备和装置
  Electronic instruments, equipment and devices
- 机械和电气设备
  Mechanical and electrical equipment
- 老化设备
  Burn-in equipment

■ 描述 Description:

GSP800W 系列是一款 800W 单组输出 AC 转 DC 电源，100-240V 交流输入，整系列提供 5V，12V，15V，24V，27V，36V 和 48V 直流隔离输出。内置控速风扇散热，工作温度可达 70℃。含有多种功能如输出电压电流可调，远程开关控制，辅助电源。具有完整的保护功能，EMC 性能好，高可靠性，安全隔离等优点。产品符合 IEC/UL/EN/BS EN62368、EN61558、GB4943、BIS IS13252、EN62477 等国际安全法规，符合欧盟 RoHS2.0 指令，是一款高性能的工业电源。

GSP800W series is a 800W single output AC to DC PSU, 100--240Vac input, The whole series provides 5V, 12V, 15V, 24V, 27V, 36V and 48V DC isolated output. Built-in speed fan cooling, working temperature up to 70℃. Contains a variety of functions such as output voltage and current adjustable, remote switch control, auxiliary power. With complete protection function, Excellent EMC performance, high reliability, security isolation and so on. Products comply with IEC/UL/EN/BS EN62368、EN61558、GB4943、BIS IS13252、EN62477 international safety standards and EU RoHS2.0 directive; It is a high performance industrial PSU.

选型规格 Model Selection

功率段 POWER	产品型号 MODEL	输出功率 Pout	输入电压 Vin	输出电压 Vout	输出电流 Iout	效率(%) EFF.	安规认证 SAFETY
800W	GW-GSP800W-5	400W	90-264Vac	5V	80A	87.5	CCC, CE
	GW-GSP800W-12	799.2W		12V	66.6A	92	
	GW-GSP800W-15	799.5W		15V	53.3A	92	
	GW-GSP800W-24	799.2W		24V	33.3A	91	
	GW-GSP800W-27	799.2W		27V	29.6A	92	
	GW-GSP800W-36	799.2W		36V	22.2A	92.5	
	GW-GSP800W-48	801.6W		48V	16.7A	93	

*其它安规需求认证中 Other safety requirements are pending certification.

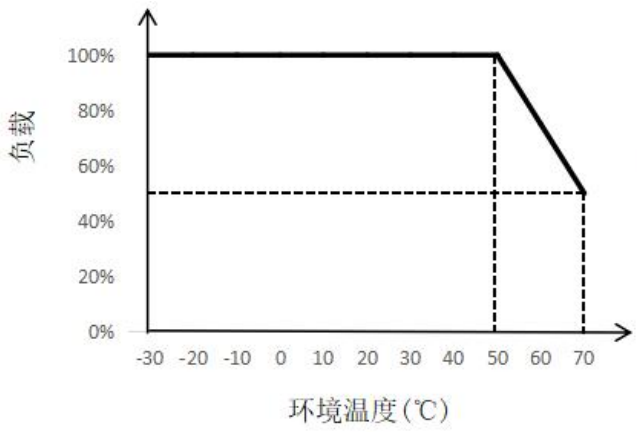
通用参数 General Specification

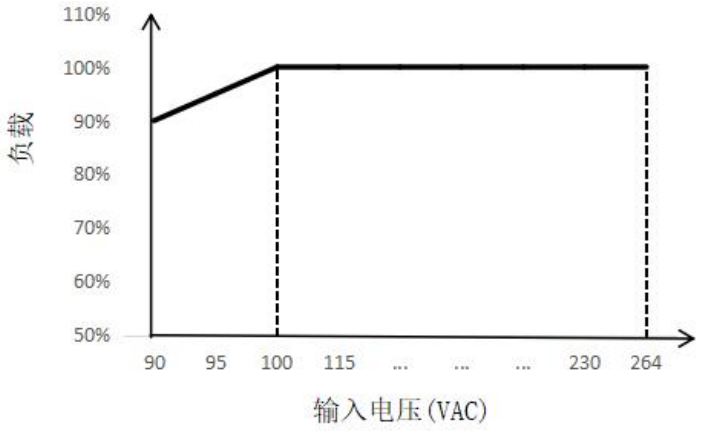
型号 MODEL		GSP800W-5	GSP800W-12	GSP800W-15	GSP800W-24	GSP800W-27	GSP800W-36	GSP800W-48
输出 Output	输出电压 Output Voltage	5V	12V	15V	24V	27V	36V	48V
	额定电流 Output Current	80A	66.6A	53.3A	33.3A	29.6A	22.2A	16.7A
	电流范围 Current Range	0~80A	0~66.6A	0~53.3A	0~33.3A	0~29.6A	0~22.2A	0~16.7A
	额定功率 Output Power	400W	799.2W	799.5W	799.2W	799.2W	799.2W	801.6W
	纹波与噪声 Ripple and Noise(备注6)	150mV	150mV	150mV	150mV	150mV	200mV	200mV
	电压调整范围 Adj-voltage range	4.75~5.5V	10~13.5V	13.5~16.5V	20~26.4V	24~30V	32.4~39.6V	43~55V

	稳压精度 Voltage stability(备注 2)	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	线性调整率 Line regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	负载调整率 Load regulation	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	保持时间 Hold-up time	12ms (230Vac/80% load)，12ms (115Vac/80% load)						
	启动时间 Startup time	≤1s （115Vac /230Vac ； 100% load）						
输入 Input	电压范围 Voltage Range	90~264Vac						
	频率范围 Frequency Range	47~63Hz						
	输入电流 Input Current	10A / 100Vac，5A / 240Vac						
	功率因数 PF	PF>0.93/230VAC PF>0.98/115VAC(100% load)						
	浪涌电流 Inrush Current	50A / 230Vac，Cold start						
	效率 Efficiency	87.5%	92%	92%	91.0%	92%	92.5%	93%
保护 Protections	过电压 OVP	5.75~7V	13.8~16.2V	17~20.5V	27.6~32.4V	31~37.5V	41.4~48.6V	56.6~66.2V
	过负载 OCP	105~130%	105~130%	105~130%	105~130%	105~130%	105~130%	105~130%
	过温度 OTP	自锁模式，异常条件移除后可自动恢复 Latch-mode, The PSU can be Auto-recovered when the fault is removed						
	短路 OSP	自锁模式，重新上电后才能恢复输出 Latch-mode, The PSU can be recovered only after it is powered on again.						
环境 Environmental	工作温度 Operating Temperature	-30～+70℃ 请参考降额曲线 Refer to the derating curve						
	工作湿度 Operating Humidity	20%～90% RH，无冷凝 Non-condensing						
	存储温度 Storage Temperature	-40～+85℃						
	存储湿度 Storage humidity	10%～95% RH，无冷凝 Non-condensing						
安规 Safety	安全规范 safety standards	IEC/UL/EN/BS EN62368、EN61558、GB4943、BIS IS13252、EN62477						
	耐压 Hi-pot	I/P - O/P：3000Vac/4242Vdc，I/P - FG：2000Vac/2828Vdc，O/P - FG：500Vac/707Vdc						
	绝缘阻抗 Insulating resistance	≥10Mohm (500VDC / 25℃ / 90% RH)						
	漏电流 Leakage Current	<2.0mA / 240VAC						
	静电放电 ESD	IEC/EN61000-4-2，CLASS B：Contact1±4KV / Air ±8KV ;						

	电磁兼容 EMC	CISPR32 / EN55032，CLASS B
其它 Others	固保期 Warranty	5Years
	MTBF	Telcordia SR-332 (Bellcore) ≥500K hrs
	尺寸 SIZE	250mm * 127mm * 41mm (L * W * H)
	包装 Packing	1.4KG；8PCS/Box
备注 Remark	1. 如未特别说明，所有规格参数均在输入为 230Vac，额定负载，25℃环境温度下进行测量，详见测试报告。 Unless otherwise specified,all spec.are measured at 230Vac,rated load, Ta=25℃, Please refer to the test report. 2. 输出电压的精度包含设定误差、线性调整率和负载调整率。 The voltage stability includes setting error,linear regulation and load regulation 3. 当产品工作于海拔 2000m 以上时，环境温度需降额 5℃/1000m。 When the power supply is working above an altitude of 2000m, the Ta must be derated by 5℃/1000m 4. 低电压输入情况下需减额输出，具体请参照输出减额曲线图。 In the case of low voltage input, the output must be derated. For details, see the output derated curve. 5. 在轻载或空载条件下,PV 电压由高压至低压调整有可能会触发 OVP 保护。建议在这种情形下调整 PV 时必须先关机，再由最低电压向上调整至需求电压。 Under light load or no-load conditions, the PV voltage adjustment from high to low voltage may trigger OVP protection. It is recommended that when adjusting PV in this case, you must turn off the PSU first, and then adjust the minimum voltage upward to the required voltage.. 6. 纹波和噪声的测试方法采用双绞线连接，输出并联 47uF 低 ESR 电容和 0.1uF 陶瓷电容，在 20MHz 带宽下进行量测。 The test method of ripple and noise is connected by twisted pair, the output is in parallel with 47uF low ESR capacitor and 0.1uF ceramic capacitor, and the measurement is carried out at 20MHz bandwidth. *产品免责声明:产品最终解释权归长城电源技术有限公司所有 详细请参阅网址 https://www.gwpst.com *Disclaimer: The final interpretation rights of the product belong to Great Wall Power Supply Technology Co., Ltd. Details please refer to https://www.gwpst.com	

■ 降额曲线 Derating Curve



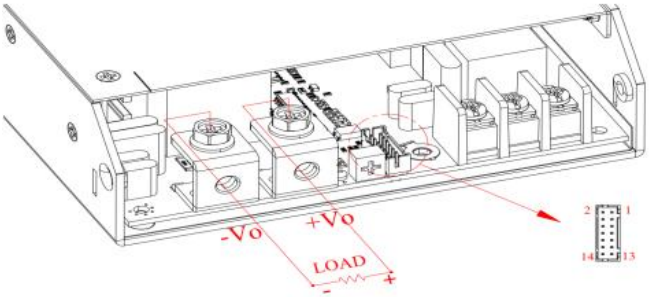


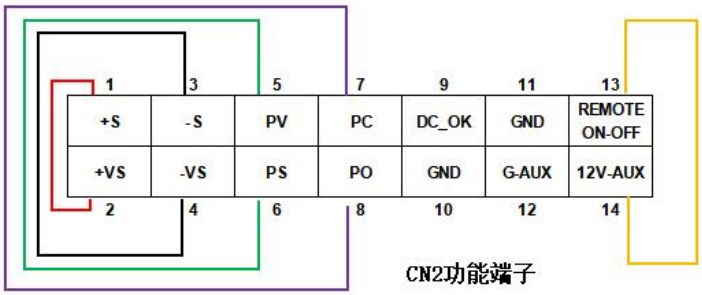
■ 功能手册 Function manual

1. 遥感 Remote Sensing

※ 遥感对负载线压降补偿最大为 0.5V

The maximum load line voltage drop compensation by remote sensing is 0.5V





※ +S 信号应连接负载的正极，-S 信号应连接负载的负极

The +S signal should be connected to the positive terminal of the load, and the -S signal should be connected to the negative terminal of the load

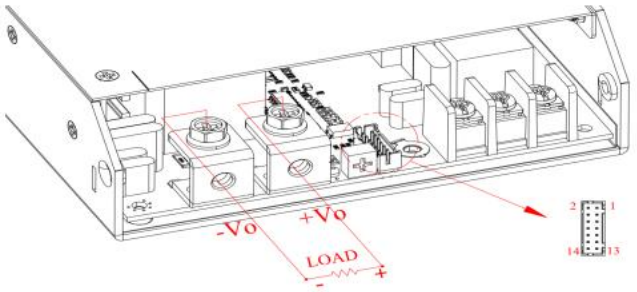
※ 电源出厂默认设置为 CN2 的 Remote ON-OFF(pin13)和 12V-AUX(14pin)短接，PV(PIN5)和 PS(PIN6)短接，PC(7pin)和 PO(8pin)短接。如果短接没有设置，电源将没有输出，除非特定的功能需要被激活。

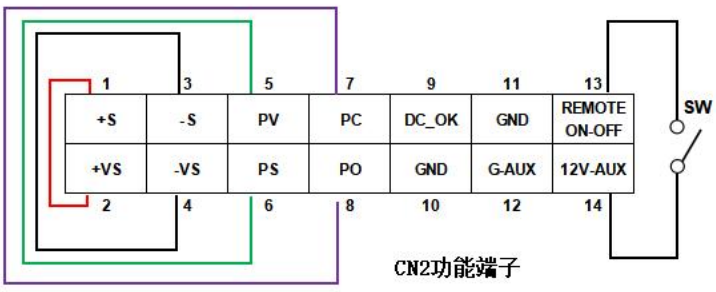
Power supply factory default Settings are CN2 Remote ON-OFF(pin13) and 12V-AUX(14pin) shorting, PV(pin5) and PS(pin6) shorting, PC(pin7) and PO(pin8) shorting. If the short circuit is not set, the power supply will have no output unless a specific function needs to be activated.

2. 遥控开/关 Remote on-off

※ 通过“遥控开/关”功能可以控制电源的开/关

The remote on-off function enables you to control the power supply ON or OFF





Remote ON-OFF (pin13) and 12V-AUX(pin14)	输出状态 output state
SW close (Short)	开 ON
SW open (Open)	关 OFF

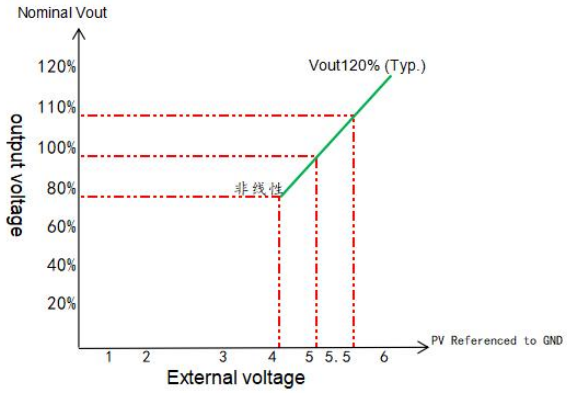
※ 当多台电源同时用遥测开/关控制时，每台电源 CN2 上的的-S 和-V 都要短接，+S 和 +V 也一样

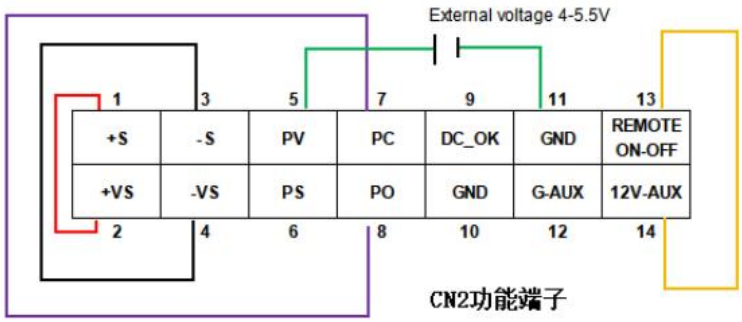
When multiple power supplies use remote ON-OFF control at the same time, the -S and -V on each power supply CN2 must be short-circuited, as well as +S and +V

3. 输出电压调整（或 PV/远程电压调整）Output voltage adjustment (or PV/ remote voltage adjustment)

※ 除了通过内部电位器调整，输出电压还可以通过外部电压调整到额定电压的 80%-110%

In addition to adjustment by internal potentiometer, the output voltage can also be adjusted to 80%-110% of the rated voltage by external voltage





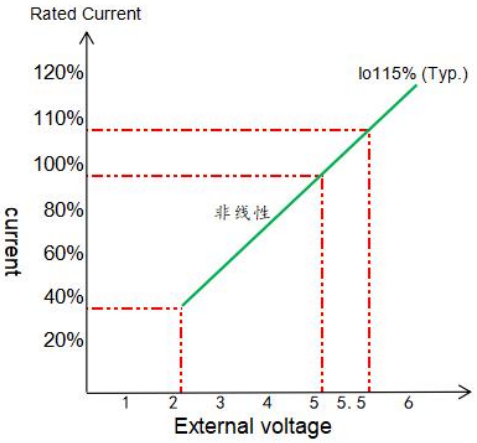
※ 注意：工厂默认设置为输出电压调整功能没有使用，同时 PV(5pin)和 PS(6pin)是短接在一起的。当不需要输出电压可调整功能时，请保证 PV(pin5)和 PS(pin6)短路；否则电源将没有输出。

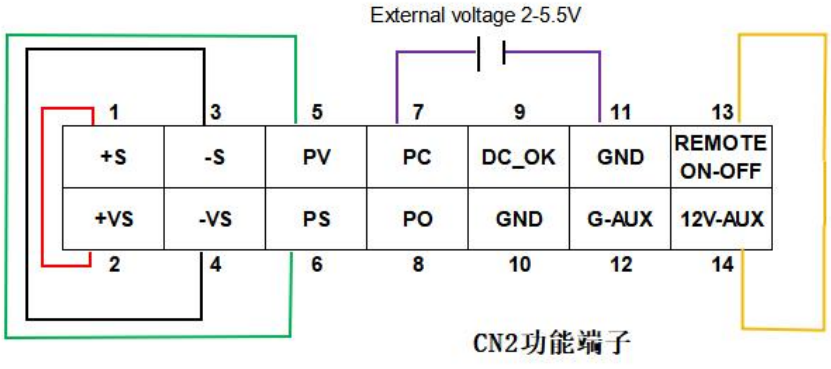
Note: The factory default setting for output voltage adjustment is not used, and PV(5pin) and PS(6pin) are shorted together. When the output voltage adjustable function is not required, ensure that PV(5pin) and PS(6pin) short circuit; Otherwise, the power supply will have no output.

4. 恒流值调整（或 PC/远程电流调整）Constant current value adjustment (or PC/ remote current adjustment)

※ 输出电流可以通过外部电压调整到额定电流的 40%-110%

The output current can be adjusted to 40%-110% of the rated current by external voltage





※ 注意：工厂默认设置为输出电流调整功能没有使用，同时 PC(pin7)和 PO(pin8)是短接在一起的。当不需要输出电流可调整功能时，请保证 PC(pin7)和 PO(pin8)短路；否则电源将没有输出。

Note: The factory default setting for output current adjustment is not used, and PC(pin7) and PO(pin8) are shorted together. When the output current adjustable function is not required, ensure that the PC(pin7) and PO(pin8) are short circuited. Otherwise, the power supply will have no output.

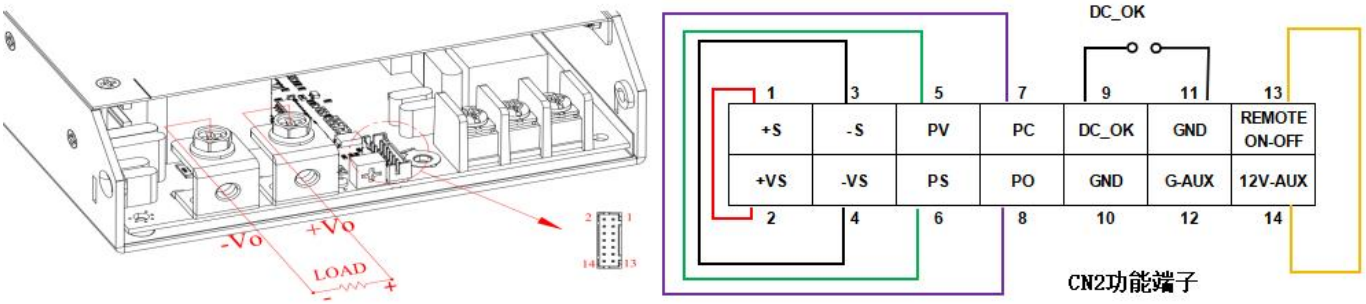
5. DC_OK 信号 DC_OK signal

“DC_OK”是一个集电极开路信号，它代表 PSU 的输出状态，它可以通过两种方式操作：
一种是从外部 TTL 信号中吸入电流；另一种是发出一个 TTL 电压信号。
"DC_OK" is an open-collector signal that represents the output state of the PSU, and it can be operated in two ways:
One is to draw current from the external TTL signal; The other is to send a TTL voltage signal.

※ 从外部 TTL 信号吸入电流：最大吸入电流是 10mA，最大外部电压是 5.6V。
Suction current from external TTL signal: The maximum suction current is 10mA and the maximum external voltage is 5.6V.

※ 发送 TTL 电压信号： Send TTL voltage signal:

DC_OK (pin9) and GND(pin10&11)	输出状态 Output state
0-1V	开 ON
3.3-5.6V	关 OFF

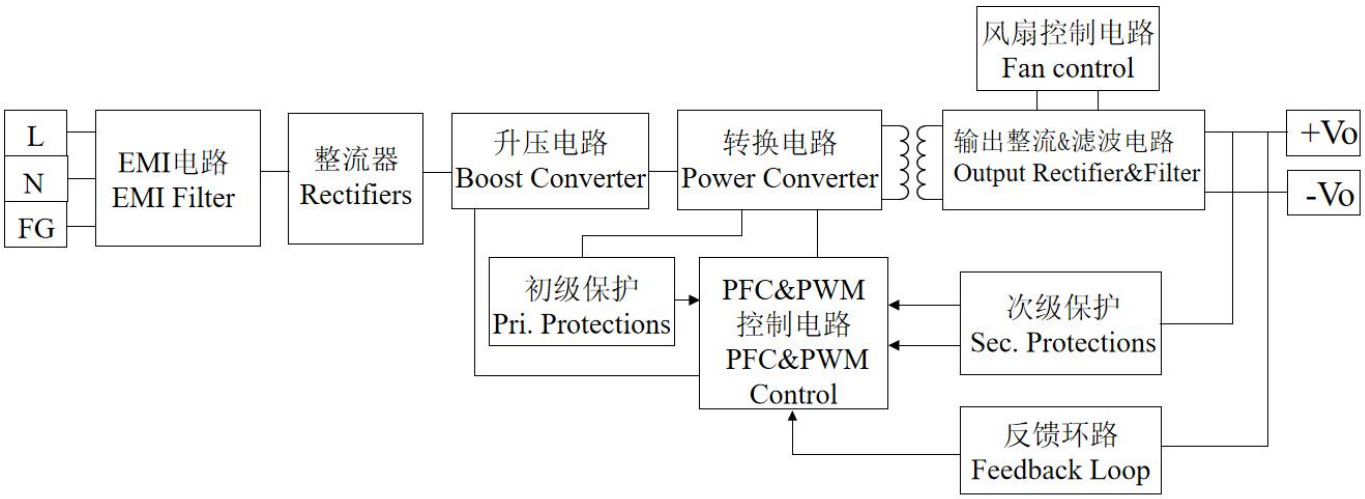


6. CN2 控制引脚说明 CN2 Control pin description

PIN	功能 Function	描述 description
1	+S	感应信号+ sensing signal +
2	+VS	+V 信号,“输出电压调整”功能应用时+VS 应连接到+S,以减少噪音 +V signal, when the "output voltage adjustment" function is applied +VS should be connected to +S to reduce noise
3	-S	感应信号- sensing signal -
4	-VS	-V 信号,“输出电压调整”功能应用时-VS 应连接到-S,以减少噪音 -V signal, when the "output voltage adjustment" function is applied -VS should be connected to -S to reduce noise
5	PV	连接外部直流电压源来调整电压，参考地 pin 10,11 Connect an external DC voltage source to adjust the voltage, reference pin 10,11
6	PS	输出电压调整参考点，请参考功能手册 For reference points for output voltage adjustment, refer to the function manual

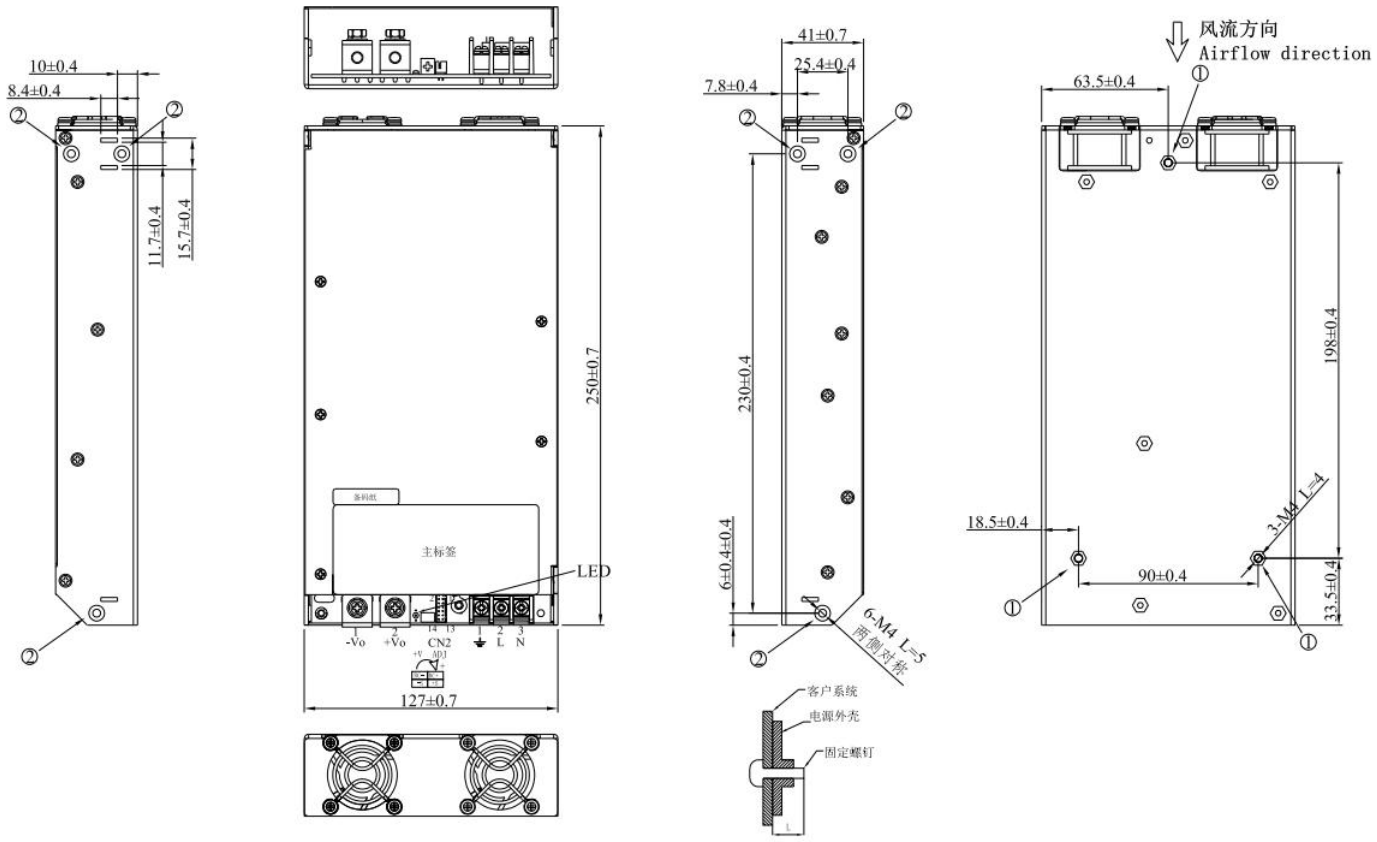
7	PC	连接外部直流电压源来调整输出电流 Connect an external DC voltage source to adjust the output current
8	PO	输出电流调整参考点，请参考功能手册 For reference points for output current adjustment, refer to the function manual
9	DC_OK	集开极开路信号,参考地 pin10,11. 低电平时 PSU 打开. 最大吸入电流为 10mA, 最大外部电压为 5.6V. Collector open-circuit signal, refer to ground pin10,11. PSU on at low voltage. The maximum suction current is 10mA and the maximum external voltage is 5.6V.
10,11	GND	连接到负极 (-V). DC_OK 信号参考地 Connect to the negative (-V).DC_OK signal reference ground
12	G-AUX	辅助输出电压 GND,该信号回路与主输出(+V&-V)是隔离的 The auxiliary output voltage GND, this signal loop is isolated from the main output (+V&-V)
13	REMOTE ON/OFF	由电子开关或 pin 13(ON/OFF) 与 pin14 (12V-AUX)之间的开关触点打开或关闭电源. 短路: 电源开机,开路:电源关机 The PSU is turned ON or OFF by an electronic switch or switching contact between pin 13(ON/OFF) and PIN 14 (12V-AUX).Short : Power on,Open:Power off
14	12V-AUX	对 pin12(G-AUX)的辅助输出电压为 10.8~14V,最大负载电流是 0.1A. 该输出不受 ON/OFF 信号控制 The auxiliary output voltage for pin12(G-AUX) is 10.8~14V, and the maximum load current is 0.1A.The output is not controlled by ON/OFF signals

■ 方框图 Block Diagram



结构参数 Mechanical Overview

■ 结构尺寸 Shape Size



端子引脚定义 Terminal pin definition

引脚编号 Pin number	1	2	3	1 (大)	2 (大)
引脚功能 Pin Feature	FG	AC/L	AC/N	Vout -	Vout +

孔编号	推荐螺丝型号	最大穿孔深度 L	推荐安装扭矩
①	M3	4mm	7~10Kgf.cm
②	M3	5mm	7~10Kgf.cm

备注：

1. 入风口与出风口各保持 30mm 的安装缝隙。

Maintain a 30mm installation gap between the power inlet and outlet.

2. 两台电源一起使用时保持 15mm 的安装缝隙，避免上下叠放安装电源。

When using two power supplies together, maintain a 15mm installation gap to avoid stacking them up and down.

* 安装手册请查阅网址：https://www.gwpst.com

* Installation manual, please refer to web.: https://www.gwpst.com