

■特性 Features:

- 输入电压范围: 90-264Vac/127-370Vdc
The input voltage range : 90-264Vac/127-370Vdc
- 工作温度高达 70℃
Operating temperature up to 70℃
- 效率最高可达 94%
The efficiency is up to 94%
- 输出低纹波噪声
Low ripple& noise output
- 电源输出 LED 指示灯, 并有 DC OK 功能
PSU output LED indicator with DC OK function
- 输出电压值可调
The output voltage is adjustable
- 4242Vdc 高隔离电压
4242Vdc high isolation voltage
- 短路、过流、过压、过温保护功能
With OSP、OCP、OVP、OTP functions
- 满足 5000M 海拔应用(备注 3)
Meet 5000M altitude application (Note 3)
- 符合 IEC/EN/UL62368、GB4943、等认证标准
Meet IEC/EN/UL62368, GB4943 Etc.certification standards
- 安装导轨: TS-35/7.5 或 TS-35/15
Can be installed on the rail frame: TS-35/7.5 or TS-35/15
- 自然风冷
Convection cooling
- 150%峰值功率持续 3 秒输出
150% peak power output for 3 seconds
- 内置主动 PFC 功能
Build in APFC
- 高可靠性, 基板三防漆工艺(可选)
High reliability, conformal coating process for substrates



■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:

DR120S 是一款高效节能、高性价比、标准导轨式安装的导轨型电源供应器, 适合安装在 TS-35/7.5 或 TS-35/15 的轨道上, 在允许节约空间橱柜内本体被设计为 32 毫米宽度。整个系列采用从 90Vac 到 264Vac 全范围交流输入, 提供 12V、24V、48V 单路输出, 输出总功率 120W。通过 CCC/CE 认证, 符合欧盟 RoHS2.0 指令。

The DR120S series of products is an efficient, energy-saving and cost-effective rail PSU that conforms to the standard rail mounted rail, which is suitable for installation in the orbit of TS-35/7.5 or TS-35/15, and designed to save the inner body of the space cabinet by 32 mm width. The entire series adapts a full range AC input from 90vac to 264vac, providing single output of 12V, 24V, 48V, with a total output power of 120W, which has passed the CCC/CE certification and the EuRoHS2.0 instruction.

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
120W	GW-DR120S-12	120W	90-264Vac/ 127-370Vdc	12V	10A	92.5	CCC/CE
	GW-DR120S-24	120W		24V	5A	94.0	
	GW-DR120S-48	120W		48V	2.5A	93.0	

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

通用参数 General Specification

型号 MODEL		DR120S-12	DR120S-24	DR120S-48
输出 Output	输出电压 Output Voltage	12V	24V	48V
	额定电流 Output Current	10A	5A	2.5A
	电流范围 Current Range	0~10A	0~5A	0~2.5A
	额定功率 Output Power	120W	120W	120W
	纹波与噪声 Ripple and Noise(备注 5)	100mV	100mV	100mV
	电压调整范围 Adj-voltage range	11.5~14.5V	23.3~28.5V	46.2~57.0V
	稳压精度 Voltage stability(备注 2)	±1.0%	±1.0%	±1.0%
	线性调整率 Line regulation	±0.5%	±0.5%	±0.5%
	负载调整率 Load regulation	±1.0%	±1.0%	±1.0%

	保持时间 Hold-up time	20ms (115Vac/100%load, 230Vac/100% load)		
	启动时间 Startup time	≤3s (115Vac/100% load), ≤1.5s (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	2A / 115Vac, 1A / 230Vac		
	功率因数 PF	PF>0.93/230VAC, PF>0.98/115VAC(100% load)		
	浪涌电流 Inrush Current	15A / 115Vac, 30A / 230Vac (Cold start)		
	效率 Efficiency	92.5%	94%	93.0%
保护 Protections	过电压 OVP	14.5~16V	29~33V	57~63V
	过负载 OCP	11~20A	5.5~10A	2.75~5A
	过温度 OTP	打嗝模式, 异常条件移除后可自动恢复 Hiccup mode, The PSU can be Auto-recovered when the fault is removed		
	短路 OSP	打嗝模式, 异常条件移除后可自动恢复 Hiccup mode, The PSU can be Auto-recovered when the fault is removed		
环境 Environmental	工作温度 Operating Temperature	-30 ~ +70°C 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°C		
	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: 1500Vac/2500Vdc; O/P - FG: 500Vac/707Vdc		
	绝缘阻抗 Insulating resistance	≥100Mohm (500VDC / 25°C / 65% RH)		
	静电放电 ESD	IEC/EN61000-4-2, CLASS A; Contact1±8KV / Air ±15KV ;		
	电磁兼容 EMC	CISPR32 / EN55032, CLASS B		
	谐波 harmonic	IEC61000-3-2, CLASS A		
其它 Others	质保期 Warranty	3Years		
	MTBF	MIL-HDBK-217F@25°C, ≥100K hrs		
	尺寸 SIZE	123.44mm * 132.2mm * 32.0mm (L * W * H) / 含卡扣		
	包装 Packing	0.54KG; 16PCS/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°C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°C, 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°C/1000m

When the power supply is working above an altitude of 2000m, the Ta must be derated by 5°C/1000m

4. 产品在任何稳态工作条件下, 总功率不应超出标示的额定功率且输出电流不应超出额定输出电流。

Under any operating conditions, the total power should not exceed the rated power indicated and the output current should not exceed the rated output current.

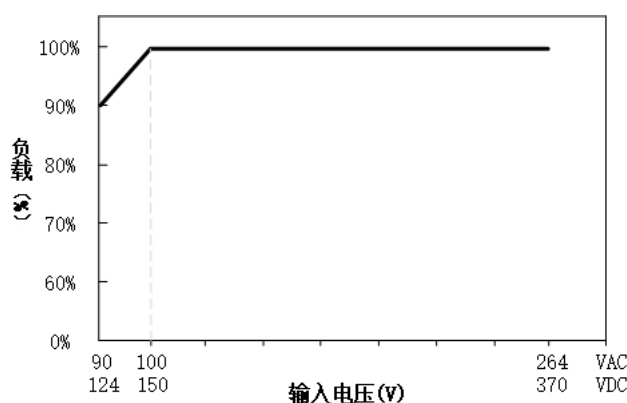
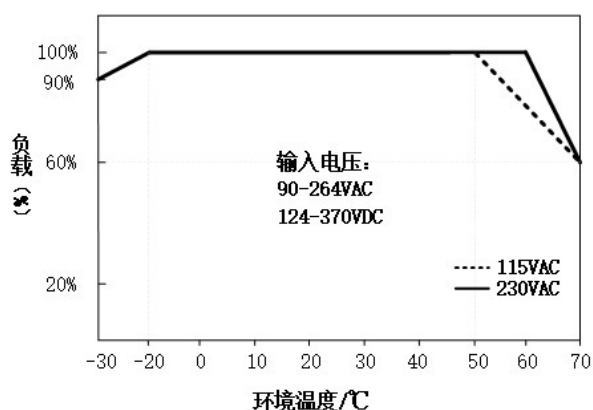
5. 纹波和噪声的测试方法采用双绞线连接, 输出并联 47uF 低 ESR 电容和 0.1uF 陶瓷电容, 在 20MHZ 带宽下进行量测。

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>

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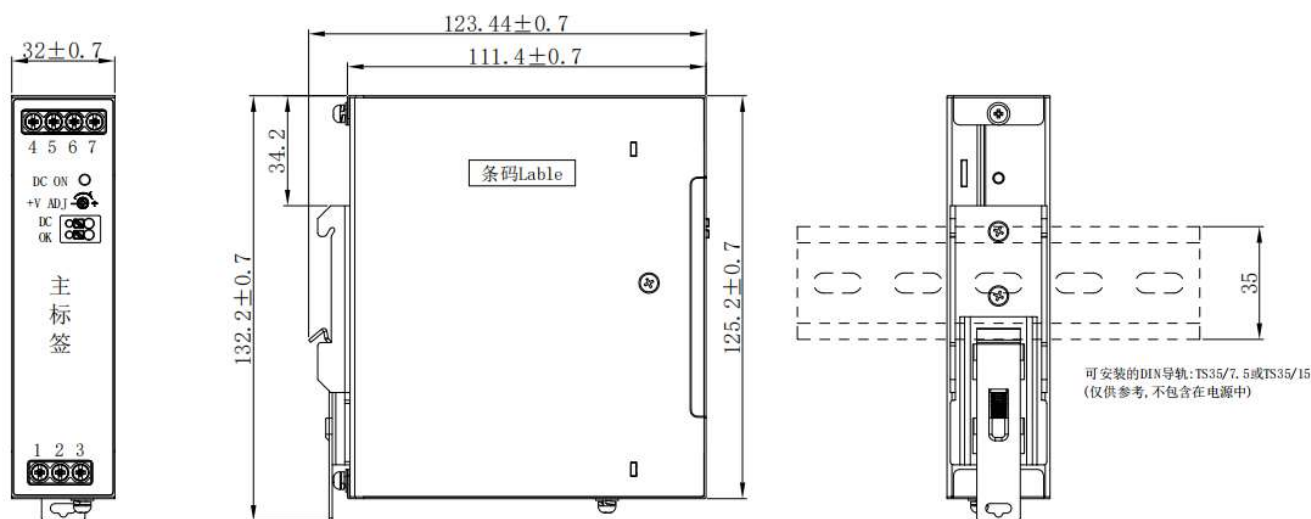
■ 降额曲线 Derating Curve



结构参数 Mechanical Overview

■ 结构尺寸 Shape Size

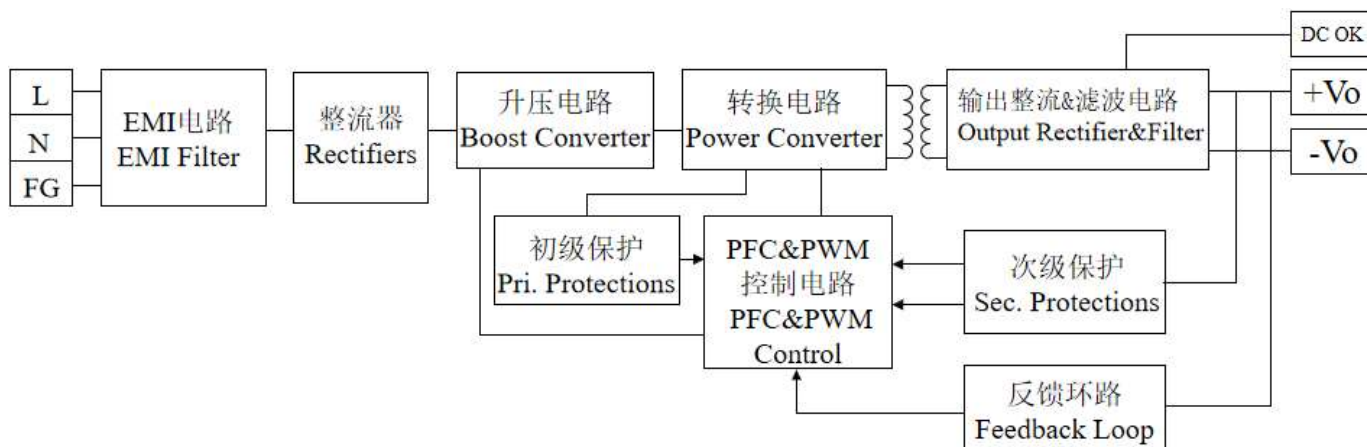
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端子引脚分布 Terminal pin arrangement

引脚编号 Pin number	引脚功能 Pin Feature
1	AC/L
2	AC/N
3	FG
4~5	Vout -
6~7	Vout +

■ 方框图 Block Diagram

* 安装手册请查阅网址: <https://www.gwpst.com>* Installation manual, please refer to web.: <https://www.gwpst.com>