

■ **特性 Features:**

- 输入电压范围: 85 - 264VAC 或 120 - 370VDC
The input voltage range : 85-264Vac/120-370Vdc
- 工作温度高达 70°C
Operating temperature up to 70°C
- 输出低纹波噪声
Low ripple & noise output
- 空载功率损耗: <0.75W
No-load power loss: <0.75W
- 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
- Class I 耐电压强度
Class I Voltage Endurance Strength
- 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/BS EN62368、 EN/EN61558 等认证标准
Meet IEC/EN/BS EN62368、 EN/EN61558 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
- 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:

DR60M 是一款薄型高性价比、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 40 毫米宽度，具有 DC-OK 继电器触点。整个系列采用从 85Vac 到 264Vac 全范围交流输入，提供 5V、12V、24V、48V 单路输出，输出总功率 60W。通过 CE/CQC/CB 认证，符合欧盟 RoHS2.0 指令。

The DR60M series of products is a thin 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-35/7.5, and designed to save the inner body of the space cabinet by 40 mm width. The entire series features a DC-OK relay contact and adopts a full range of AC input from 85Vac to 264Vac, providing single output of 5V/12V/24V/48V, with a total output power of 60W, which has passed the CE/CQC/CB certification and the Eu RoHS2.0 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
60W	GW-DR60M-5	50W	85-264Vac/ 120-370Vdc	5V	10A	78.0	CE/CQC/CB
	GW-DR60M-12	60W		12V	5A	85.0	
	GW-DR60M-24	60W		24V	2.5A	87.5	
	GW-DR60M-48	60W		48V	1.25A	88.5	

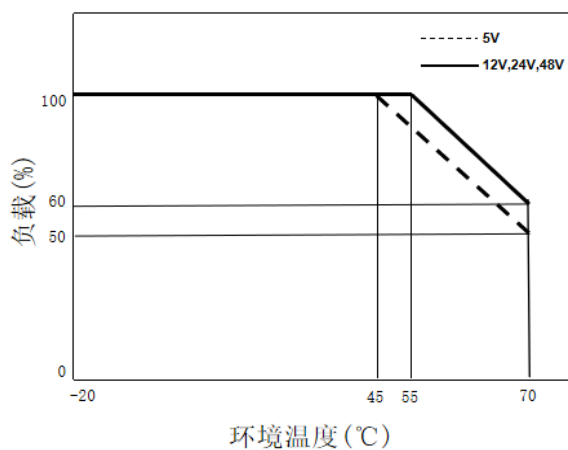
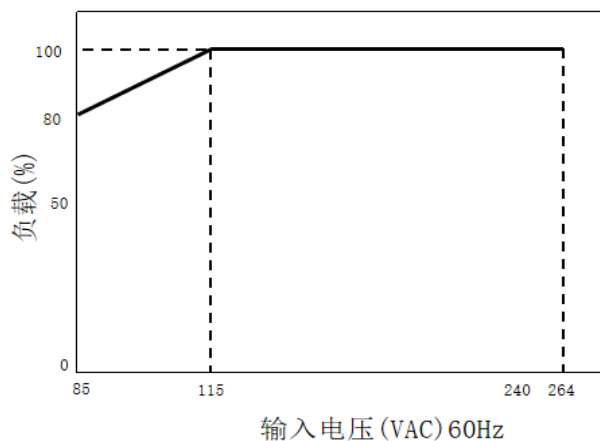
*其它安规需求认证中 Other safety requirements are pending certification.

通用参数 General Specification

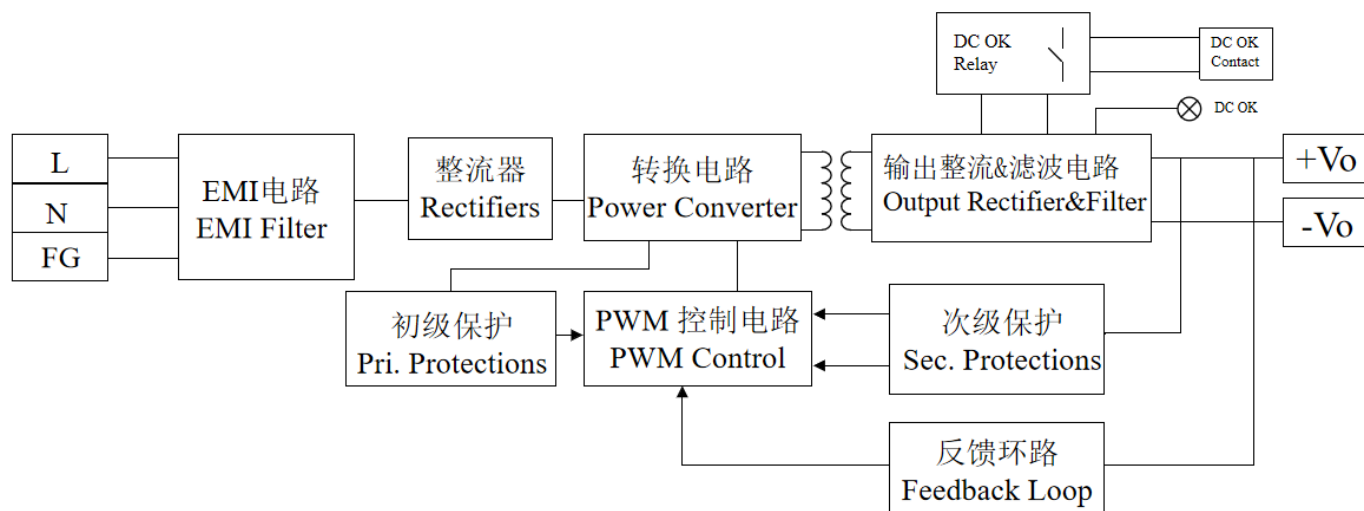
型号 MODEL		DR60M-5	DR60M-12	DR60M-24	DR60M-48
输出 Output	输出电压 Output Voltage	5V	12V	24V	48V
	额定电流 Output Current	10A	5A	2.5A	1.25A
	电流范围 Current Range	0~10A	0~5A	0~2.5A	0~1.25A
	额定功率 Output Power	50.0W	60.0W	60.0W	60.0W
	纹波与噪声 Ripple and Noise (备注 5)	80mV	100mV	150mV	170mV
	电压调整范围 Adj-voltage range	5~6V	12~15V	24~30V	48~56V
	稳压精度 Voltage stability (备注 2)	±2%	±1%	±1%	±1%
	线性调整率 Line regulation	±1%	±1%	±1%	±1%
	负载调整率 Load regulation	±1%	±1%	±1%	±1%
	保持时间 Hold-up time	20ms (115Vac/100%load), 50ms(230Vac/100% load)			
启动时间 Startup time	≤1s (230Vac/100% load)				
输入	电压范围 Voltage Range	85~264Vac			

Input	频率范围 Frequency Range	47~63Hz			
	输入电流 Input Current	1.8A/115Vac, 1A/230Vac			
	浪涌电流 Inrush Current	30A / 115Vac, 60A / 230Vac (Cold start)			
	效率 Efficiency	78%	85%	87.5%	88.5%
保护 Protections	过电压 OVP	6.25-7.25V	15.5~ 20V	30.5 ~ 35V	56.5 ~ 63V
	过负载 OCP	12~13A	6~7A	3~4A	1.5~ 2.5A
	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	-20 ~ +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	固保期 Warranty	3Years			
	MTBF	MIL-HDBK-217F @25°C, ≥100K hrs			
	尺寸 SIZE	90.0mm*100.0mm*40mm(L * W * H)			
	包装 Packing	0.3KG			
备注 Remark	<p>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.</p> <p>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</p> <p>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</p> <p>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.</p> <p>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.</p> <p>*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.cn</p> <p>*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</p>				

■ 降额曲线 Derating Curve

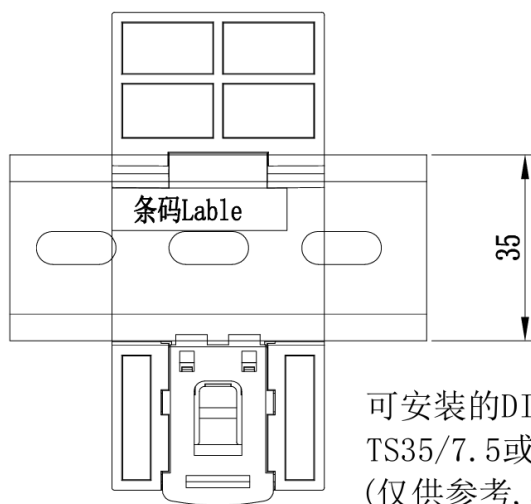
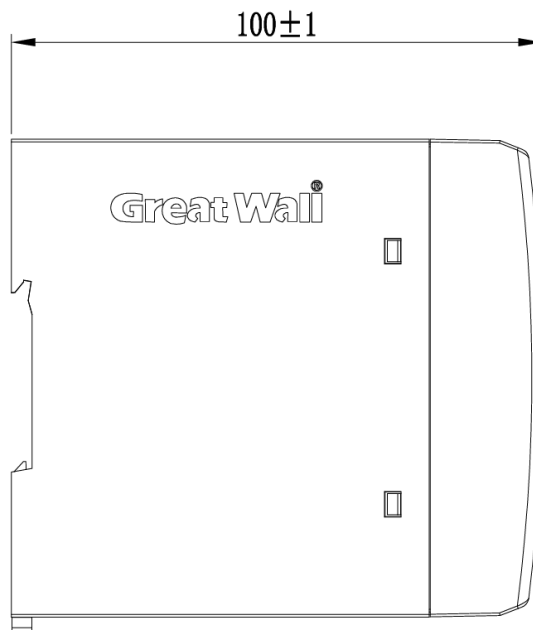
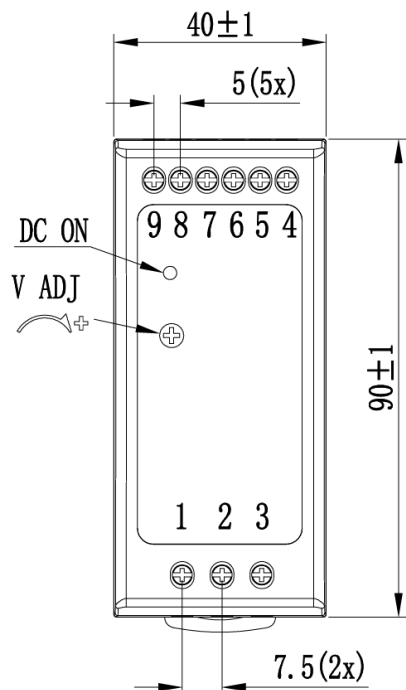


■ 方框图 Block Diagram



结构参数 Mechanical Overview

■ 结构尺寸 Shape Size



可安装的DIN导轨:
TS35/7.5或TS35/15
(仅供参考, 不包含在电源中)

引脚功能	
引脚	功能
1	\oplus
2	AC (N)
3	AC (L)
4	DC OK-
5	DC OK+
6, 7	-V
8, 9	+V

* 安装手册请查阅网址: <https://www.gwpst.cn>

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