



40W AC-DC可信赖的绿色医疗型适配器 GSM40A系列



■ 特性:

- 3极交流IEC320-C14输入接口, Class I 电源
- 通过ANSI/AAMI ES60601-1和IEC/EN60601-1 医疗类安规认证(2 x MOPP)
- 极低漏电流
- 空载功耗<0.1W
- 能效等级 VI 并满足CoC Version 5 (5~9V:能效等级 V)
- -30~+70°C 宽工作温度范围
- 保护种类: 短 / 过负载/过电压
- LED指示电源开启
- 寿命>90K小时
- 3年保固

■ 应用:

- 移动临床工作站
- 冲牙器
- 便携式血液透析仪
- 呼吸机
- 医疗电脑监视器

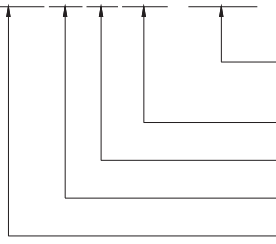
■ 描述:

GSM40A系列是一个高信赖性, 40W单组输出绿色环保医疗型适配器, 该产品是class I电源(有FG), 装配 IEC320-C14 AC标准插头。采用80Vac~264Vac输入电压, 整系列提供从5Vdc到48Vdc之间不同的输出电压, 能够满足各种医疗电气设备的需求。电 设计符合国际医疗标准(2 * MOPP), 具有超低漏电流(<90μA),适合用于与患者直接接触的医疗设备。

GSM40A效率高达91%, 低于0.1W的超低空载功耗, GSM40A符合USA EISA 2007/DoE, Canada NRCAN, Australia and New Zealand MEPS, EU ErP, 并且满足Code of Conduct (CoC) Version 5; 最显著的特征是当工作于正常模式或待机模式时, 适配器可节省能耗。整系列采用94V-0阻燃塑料外壳, 提供能有效防护电击的双重绝缘保护。GSM40A通过国际医疗安全认证。

■ 型号编码

GSM40A 05 - P1J



- DC插头类型 { P1J: 标准型插头, 2.1φ x 5.5φ x 11mm, c+, 音叉型
以客户需求可选插头型号(详见4~5页)
- 输出电压
- IEC320-C14 AC接口
- 额定功率
- 系列名

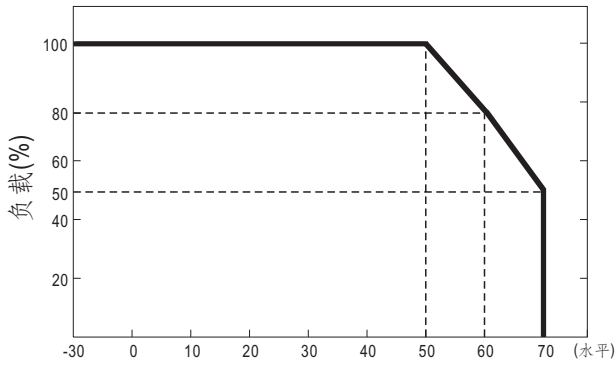


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电气规格

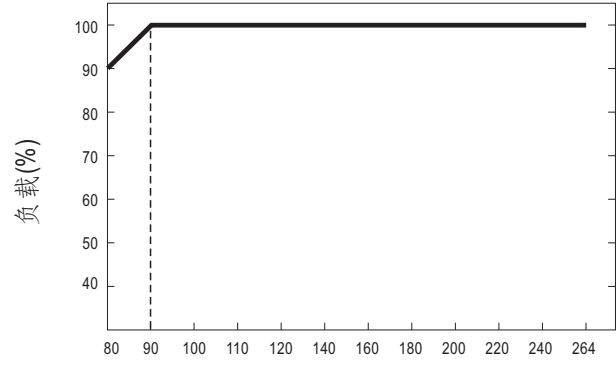
| 型号 | GSM40A05-P1J | GSM40A07-P1J | GSM40A09-P1J | GSM40A12-P1J | GSM40A15-P1J | GSM40A18-P1J | GSM40A24-P1J | GSM40A48-P1J | | |
|---------------------------|---|--|--|--------------|--------------|---|--|--------------------------|------------|--|
| 输出 | 安规型号 | GSM40A05 | GSM40A07 | GSM40A09 | GSM40A12 | GSM40A15 | GSM40A18 | GSM40A24 | GSM40A48 | |
| | 直流电压 备注2 | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V | 48V | |
| | 额定电流 | 5A | 5.34A | 4.45A | 3.34A | 2.67A | 2.22A | 1.67A | 0.84A | |
| | 电流范围 | 0.1~5A | 0.1~5.34A | 0.1~4.45A | 0.1~3.34A | 0.1~2.67A | 0.1~2.22A | 0.1~1.67A | 0.1~0.84A | |
| | 额定功率(最大) | 25W | 40W | 40W | 40W | 40W | 40W | 40W | 40W | |
| | 纹波与噪声(最大) 备注3 | 80mVp-p | 80mVp-p | 100mVp-p | 100mVp-p | 100mVp-p | 120mVp-p | 150mVp-p | 150mVp-p | |
| | 电压精度 备注4 | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.5% | ±2.5% | |
| | 线性调整率 备注5 | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | 负载调整率 | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.5% | ±2.5% | |
| | 启动,上升时间 备注6 | 1000ms, 30ms / 230VAC 1500ms, 30ms / 115VAC(满载时) | | | | | | | | |
| 保持时间(Typ.) | 50ms / 230VAC 24ms / 115VAC(满载时) | | | | | | | | | |
| 输入 | 电压范围 备注7 | 80~264VAC 113~370VDC | | | | | | | | |
| | 频率范围 | 47~63Hz | | | | | | | | |
| | 效率(Typ.) | 81% | 85.5% | 86% | 88% | 88.5% | 89.5% | 90% | 91% | |
| | 交流电流(Typ.) | 1A / 115VAC 0.5A / 230VAC | | | | | | | | |
| | 浪涌电流(Typ.) | 冷启动: 30A / 115VAC 60A / 230VAC | | | | | | | | |
| | 漏电流(最大) | 对地漏电流<90μA/264VAC 接触电流<90μA/264VAC | | | | | | | | |
| 保护 | 过负载 | 额定输出功率的105%~160% 保护模式:打嗝模式, 负载异常条件移除后可自动恢复 | | | | | | | | |
| | 过电压 | 5.2~7.0V | 7.8~10.2V | 9.4~12.2V | 12.6~16.2V | 15.7~20.3V | 18.9~24.3V | 25.2~32.4V | 50.4~64.8V | |
| 环境 | 工作温度 | -30~+70°C (请参考"减额曲线") | | | | | | | | |
| | 工作湿度 | 20~90% RH, 无冷凝 | | | | | | | | |
| | 储存温度、湿度 | -40~+85°C, 10~95% RH, 无冷凝 | | | | | | | | |
| | 温度系数 | ±0.03%/°C (0~50°C) | | | | | | | | |
| | 耐振动 | 10~500Hz, 2G 10分钟/周期, X、Y、Z轴各60分钟 | | | | | | | | |
| | 操作高度 备注8 | 3000米 | | | | | | | | |
| 安规和 电磁兼容 (备注9) | 安全规范 | IEC60601-1, TUV EN60601-1, ANSI/AAMI ES60601-1(3.1 version), CAN/CSA-C22.2 No. 60601-1:14 - Edition 3, EAC TP TC 004认证通过 | | | | | | | | |
| | 绝缘防护等级 | 一次侧-二次侧: 2xMOPP, 一次侧-接地: 1xMOPP | | | | | | | | |
| | 耐压 | I/P-O/P: 4KVAC I/P-FG: 2KVAC O/P-FG: 短 | | | | | | | | |
| | 绝缘阻抗 | I/P-O/P, I/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | |
| | 电磁兼容发射 | Parameter | Standard | | | | | Test Level / Note | | |
| | | Conducted emission | EN55011 (CISPR11), FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) | | | | | Class B | | |
| | | Radiated emission | EN55011 (CISPR11), FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) | | | | | Class B | | |
| | | Harmonic current | EN61000-3-2 | | | | | Class A | | |
| | Voltage flicker | EN61000-3-3 | | | | | ----- | | | |
| | 电磁兼容抗扰度 | EN55024, EN60601-1-2, EN61204-3 | | | | | | | | |
| Parameter | | Standard | | | | | Test Level / Note | | | |
| ESD | | EN61000-4-2 | | | | | Level 4, 15KV air ; Level 4, 8KV contact | | | |
| RF field susceptibility | | EN61000-4-3 | | | | | Level 3, 10V/m(80MHz~2.7GHz) Table 9, 9~28V/m(385MHz~5.78GHz) | | | |
| EFT bursts | | EN61000-4-4 | | | | | Level 3, 2KV | | | |
| Surge susceptibility | | EN61000-4-5 | | | | | Level 3, 1KV/Line-Line , 2KV/Line-FG | | | |
| Conducted susceptibility | | EN61000-4-6 | | | | | Level 3, 10V | | | |
| Magnetic field immunity | | EN61000-4-8 | | | | | Level 4, 30A/m | | | |
| Voltage dip, interruption | EN61000-4-11 | | | | | 100% dip 1 periods, 30% dip 25 periods, 100% interruptions 250 periods | | | | |
| 其它 | MTBF | 740K hrs min. MIL-HDBK-217F(25°C) | | | | | | | | |
| | 尺寸 | 125*50*31.5mm (L*W*H) | | | | | | | | |
| | 包装 | 0.29Kg; 40pcs/12.6Kg/1.05CUFT | | | | | | | | |
| 连接器 | 插头 | 参考第4~5页,其它型号可依客户需求订制 | | | | | | | | |
| | 配线 | 参考第4~5页,其它型号可依客户需求订制 | | | | | | | | |
| 备注 | <ol style="list-style-type: none"> 如未特别说明,所有规格参数均在输入为230VAC、额定负载、25°C 70%RH 环境温度下进行量测。 直流电压测量方法:在50%负载条件下,在插座端子点量测。 纹波和噪声测量方法:使用一条12"双绞线,同时终端要并联0.1uf和47uf的电容,在20MHz带宽下进行量测。 精度:包含设定误差、线性调整率和负载调整率。 线性调整率测量方法:在额定负载下,从低电压到高压测试。 启动时间是在冷机启动下测得,频繁的开关机可能使启动时间增长。 低输入电压情况下需减额输出,具体请参照静态特性曲线图。 当海拔高度超过2000米(6500英尺)时,无风扇机型环境温度依每3.5°C/1000m比例下降,有风扇机型环境温度依每5°C/1000m比例下降。 电源被视为系统内元件的一部分,需结合终端设备进行电磁兼容相关确认。 EMC测试方法的指引,请参照明纬公司网站 http://www.meanwell.com.cn 上的"EMI测试声明书"。 | | | | | | | | | |

■ 减额曲线



环境温度 (°C)

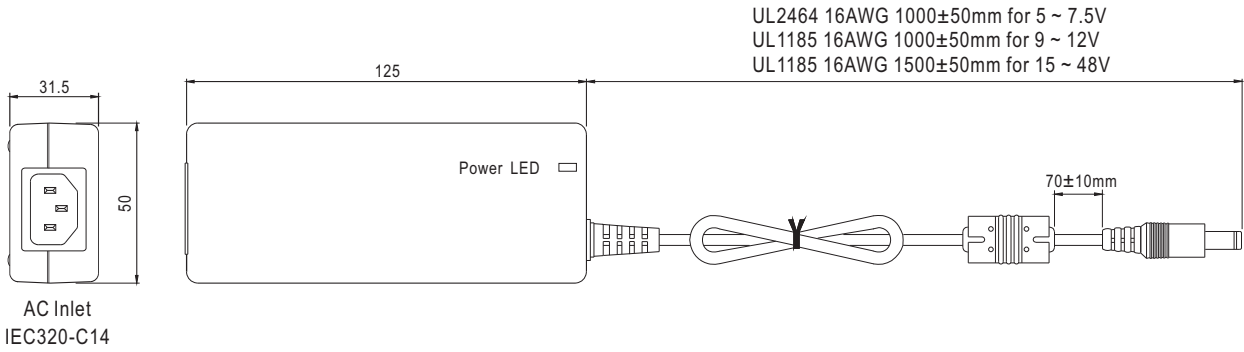
■ 静态特性曲线



输入电压 (VAC) 60Hz

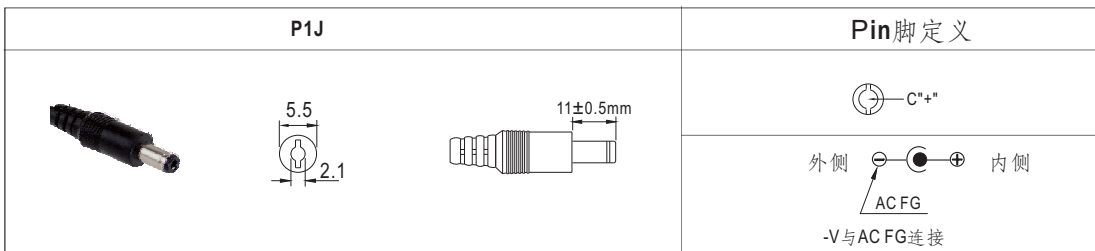
■ 机构尺寸

机壳型号: GS60A 单位:mm



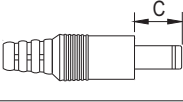
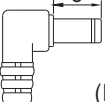


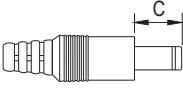
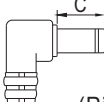


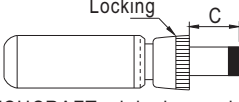


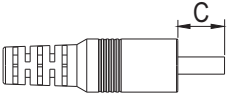

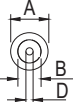
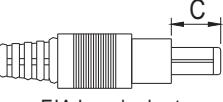

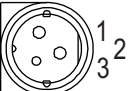
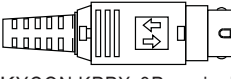



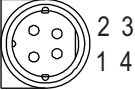
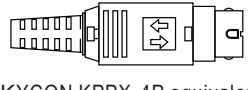


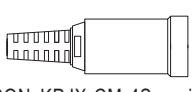




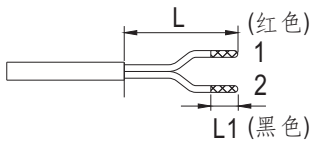
■ Dc输出插头

◎ 标准插头: P1J



◎ 可选DC插头:

| Tuning Fork Style | | 型号 | A | B | C | |
|---|---|------------|--------|------|-------|------------|
| | | | OD | ID | L | |
|   |  (Straight) | P1I | 5.5 | 2.1 | 9.5 | |
| | | P1L | 5.5 | 2.5 | 9.5 | |
| | | P1M | 5.5 | 2.5 | 11.0 | |
| |  (Right-angled) | P1IR | 5.5 | 2.1 | 9.5 | |
| | | P1JR | 5.5 | 2.1 | 11.0 | |
| | | P1LR | 5.5 | 2.5 | 9.5 | |
| P1MR | 5.5 | 2.5 | 11.0 | | | |
| Barrel Style | | 型号 | A | B | C | |
| | | | OD | ID | L | |
|   |  (Straight) | P2I | 5.5 | 2.1 | 9.5 | |
| | | P2J | 5.5 | 2.1 | 11.0 | |
| | | P2L | 5.5 | 2.5 | 9.5 | |
| | | P2M | 5.5 | 2.5 | 11.0 | |
| |  (Right-angled) | P2IR | 5.5 | 2.1 | 9.5 | |
| | | P2JR | 5.5 | 2.1 | 11.0 | |
| | | P2LR | 5.5 | 2.5 | 9.5 | |
| | | P2MR | 5.5 | 2.5 | 11.0 | |
| Lock Style | | 型号 | A | B | C | |
| | | | OD | ID | L | |
|   SWITCHCRAFT original or equivalent |  Locking | P2S(S761K) | 5.53 | 2.03 | 12.06 | |
| | | P2K(761K) | 5.53 | 2.54 | 12.06 | |
| | | P2C(S760K) | 5.53 | 2.03 | 9.52 | |
| | | P2D(760K) | 5.53 | 2.54 | 9.52 | |
| Min. Pin Style | | 型号 | A | B | C | |
| | | | OD | ID | L | |
|   EIAJ equivalent |  EIAJ equivalent | P3A | 2.35 | 0.7 | 11.0 | |
| | | P3B | 4.0 | 1.7 | 11.0 | |
| | | P3C | 4.75 | 1.7 | 11.0 | |
| Center Pin Style | | 型号 | A | B | C | D |
| | | | OD | ID | L | Center Pin |
|   EIAJ equivalent |  EIAJ equivalent | P4A | 5.5 | 3.4 | 11.0 | 1.0 |
| | | P4B | 6.5 | 4.4 | 11.0 | 1.4 |
| | | P4C | 7.4 | 5.1 | 11.0 | 0.6 |
| Min. DIN 3 Pin with Lock (公头) | | 型号 | Pin脚定义 | | | |
| | | | PIN脚编号 | | 输出 | |
|   KYCON KPPX-3P equivalent |  KYCON KPPX-3P equivalent | 1 | | +Vo | | |
| | | 2 | | -Vo | | |
| | | 3 | | +Vo | | |

| Min. DIN 4 Pin with Lock (公头) | 型号 | Pin脚定义 | |
|--|------|--------|-----|
| | | PIN脚编号 | 输出 |
|    <p>KYCON KPPX-4P equivalent</p> | R7B | 1 | +Vo |
| | | 2 | -Vo |
| | | 3 | -Vo |
| | | 4 | +Vo |
| Min. DIN 4 Pin with Lock (母头) | 型号 | Pin脚定义 | |
|    <p>KYCON KPJX-CM-4S equivalent</p> | R7BF | 1 | +Vo |
| | | 2 | -Vo |
| | | 3 | -Vo |
| | | 4 | +Vo |
| DIN 5 Pin (公头) | 型号 | Pin脚定义 | |
|    | R1B | 1 | -Vo |
| | | 2 | -Vo |
| | | 3 | +Vo |
| | | 4 | -Vo |
| | | 5 | +Vo |
| 剥线和镀锡引线 | 型号 | Pin脚定义 | |
|   <p>L1的长度可根据需求订制 (明纬标准品长度, L: <u>25</u> mm, L1: <u>5</u> mm)</p> | 订制品 | 1 | +Vo |
| | | 2 | -Vo |

■ 安装手册

请查阅：<http://www.meanwell.com/manual.html>