



■ Features

- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8
- High efficiency up to 91%
- Low leakage current $<50\mu A$
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Medical safety approved ($2\times$ MOPP between primary to secondary)
- Class II power (without earth pin)
- LED indicator for power on
- No load power consumption $<0.1W$
- ErP step2 compliant (level V)
- Meet EISA 2007 (Energy Independence and Security Act)
- 100% full load burn-in test
- Optional lock type DC plug
- 3 years warranty

■ Applications

- Mobile clinical workstation
- Oral irrigator
- Portable hemodialysis machine
- Breath Machine
- Medical computer monitor

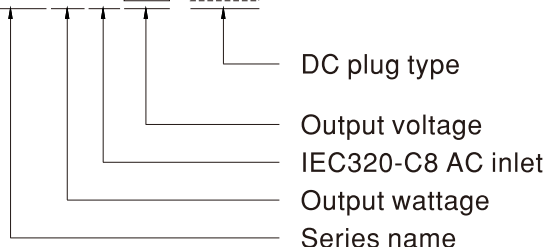
■ Description

GSM40B is a highly reliable, 40W single-output green medical adaptor series. This product is equipped with a 2-pin (no FG) standard IEC320-C8 power plug, adopting the input range from 80VAC to 264VAC. The entire series supplies different output voltages between 5VDC and 48VDC that can satisfy the demands for various kinds of medical electrical devices. The circuitry design meets the international medical standards ($2\times$ MOPP), having an ultra low leakage current ($<50\mu A$), fitting the medical devices in direct electrical contact with the patients.

With the efficiency up to 91% and the extremely low no-load power consumption below 0.1W, the design of GSM40B observes the latest energy regulation (Level V); the supreme feature allows the adaptor to save the energy when it is either under the operating mode or the standby mode. The entire series utilizes the 94V-0 flame retardant plastic case, providing the double insulation that effectively prevents electrical shock. GSM40B is approved with the international medical safety certificates.

■ Model Encoding

GSM40 B 05 - P1J





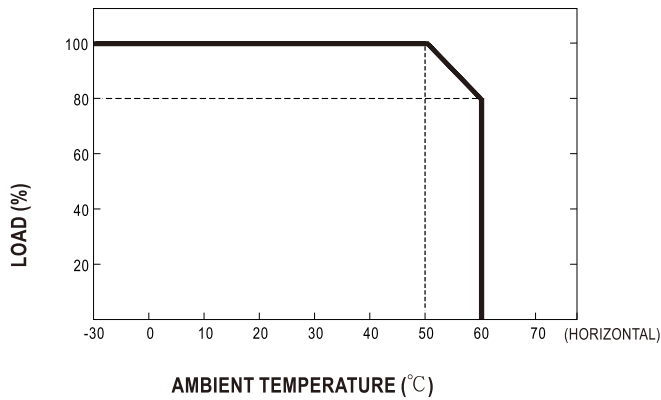
40W AC-DC Single Output Medical Adaptor

GSM40B series

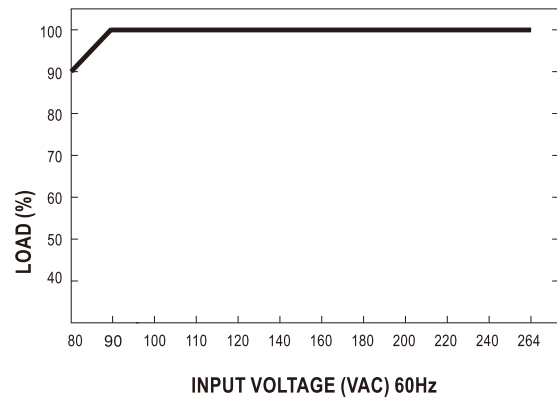
SPECIFICATION

| ORDER NO. | | GSM40B05-P1J | GSM40B07-P1J | GSM40B09-P1J | GSM40B12-P1J | GSM40B15-P1J | GSM40B18-P1J | GSM40B24-P1J | GSM40B48-P1J |
|---------------------------|---|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| OUTPUT | SAFETY MODEL NO. | GSM40B05 | GSM40B07 | GSM40B09 | GSM40B12 | GSM40B15 | GSM40B18 | GSM40B24 | GSM40B48 |
| | DC VOLTAGE Note.2 | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V | 48V |
| | RATED CURRENT | 5A | 5.34A | 4.45A | 3.34A | 2.67A | 2.22A | 1.67A | 0.84A |
| | CURRENT RANGE | 0 ~ 5A | 0 ~ 5.34A | 0 ~ 4.45A | 0 ~ 3.34A | 0 ~ 2.67A | 0 ~ 2.22A | 0 ~ 1.67A | 0 ~ 0.84A |
| | RATED POWER (max.) | 25W | 40W | 40W | 40W | 40W | 40W | 40W | 40W |
| | RIPPLE & NOISE (max.) Note.3 | 100mVp-p | 100mVp-p | 100mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 180mVp-p | 240mVp-p |
| | VOLTAGE TOLERANCE Note.4 | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.5% | ±2.5% |
| | LINE REGULATION Note.5 | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LOAD REGULATION | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.5% | ±2.5% |
| | SETUP, RISE TIME Note.6 | 1000ms, 30ms / 230VAC 1500ms, 30ms / 115VAC at full load | | | | | | | |
| HOLD UP TIME (Typ.) | 50ms / 230VAC 15ms / 115VAC at full load | | | | | | | | |
| INPUT | VOLTAGE RANGE | 80 ~ 264VAC 113 ~ 370VDC | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | |
| | EFFICIENCY (Typ.) | 81% | 85.5% | 86% | 88% | 88.5% | 89% | 90% | 91% |
| | AC CURRENT (Typ.) | 1A / 115VAC 0.5A / 230VAC | | | | | | | |
| | INRUSH CURRENT (Typ.) | 30A / 115VAC 65A / 230VAC | | | | | | | |
| | LEAKAGE CURRENT(max.) | Touch current < 50 μ A/264VAC | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | |
| | OVER VOLTAGE | 5.25 ~ 6.75V 7.88 ~ 10.13V 9.45 ~ 12.15V 12.6 ~ 16.2V 15.75 ~ 20.25V 18.9 ~ 24.3V 25.2 ~ 32.4V 50.4 ~ 64.8V Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | |
| | | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +60℃ (Refer to "Derating Curve") | | | | | | | |
| | WORKING HUMIDITY | 20% ~ 90% RH non-condensing | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85℃, 10 ~ 95% RH | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03% / °C (0 ~ 50℃) | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | |
| SAFETY & EMC (Note. 7) | SAFETY STANDARDS | ANSI/AAMI ES60601-1 / ES60601-1-11, TUV EN60601-1 / 60601-1-11 approved | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:4KVAC O/P-FG:SHORT | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH | | | | | | | |
| | EMC EMISSION | Compliance to EN55011(CISPR11) class B, EN61000-3-2,3, FCC PART 15 class B | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3 medical level, criteria A | | | | | | | |
| OTHERS | MTBF | 740K hrs min. MIL-HDBK-217F(25℃) | | | | | | | |
| | DIMENSION | 125*50*31.5mm (L*W*H) | | | | | | | |
| | PACKING | 0.29Kg; 40pcs/12.6Kg/1.05CUFT | | | | | | | |
| CONNECTOR | PLUG | Standard type P1J: 2.1 ϕ * 5.5 ϕ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested | | | | | | | |
| | CABLE | See page 2 ; Other type available by customer requested | | | | | | | |
| NOTE | 1. All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient. 2. DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4. Tolerance: includes set up tolerance, line regulation, load regulation. 5. Line regulation is measured from low line to high line at rated load. 6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. 7. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to “EMI testing of component power supplies.” (as available on http://www.meanwell.com) | | | | | | | | |

Derating Curve

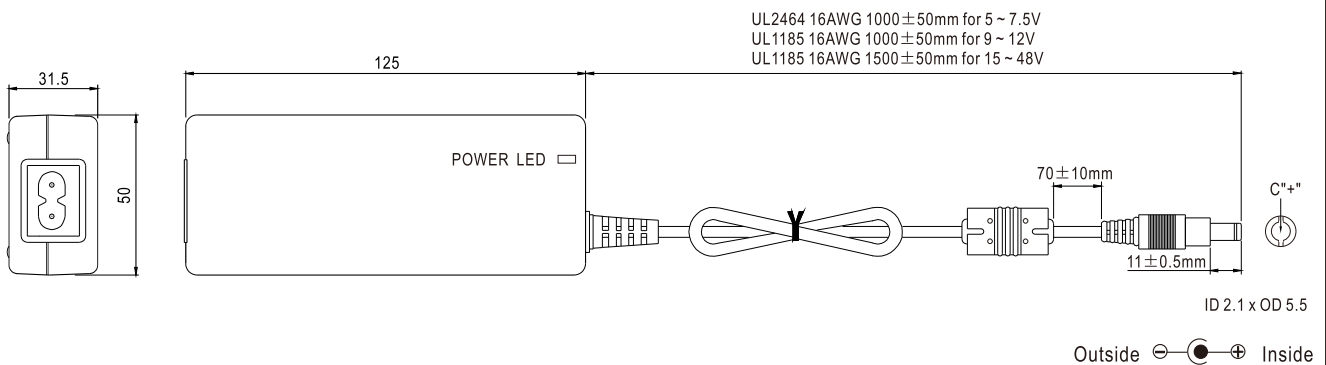


Static Characteristics



Mechanical Specification

Case No. GSM60B Unit:mm



Plug Assignment

Standard plug: P1M

| P1M | |
|--------|--------|
| P/N | OUTPUT |
| CENTER | + |

Optional lock type plug: P2S

SWITCHCRAFT S761K plug equivalent

Installation Manual

Please refer to : <http://www.meanwell.com/webnet/search/InstallationSearch.html>