

MENB1050

Universal Input 50 Watt Series

Medical Switch-Mode Power Supply



3 Year Warranty

- 100-240Vac Universal Input
- Meets EISA2007, CEC Efficiency Level V, EU (EC) No 278/2009 Phase II
- Certified to UL/EN60601-1
- Desktop Style
- 5V to 24V Single Output Models, up to 50W
- Modified and Custom Designs Available
- Regulated Output with Low Ripple
- Impact-Resistant Polycarbonate Enclosure
- No load Power Consumption <0.3W



Specifications

All Specifications are typical at nominal input, full load at 25°C unless otherwise stated.

| | | | |
|--------------------------------|--|--------------------------|---|
| AC Input | 100-240Vac, +/-10%, 47-63 Hz, 1Ø | MTBF | >100,000 hours (calculated) |
| Input Current | 100VAC: 1.5A max | Hold-up Time | 18 ms min. @ 115Vac, 60 ms min. @ 230 Vac |
| Inrush Current | 60 A peak, 264 V, cold start | Overload Protection | Hiccup Mode |
| Input Fuse | 2.0A, 250V Internal Primary Current Fuse is provided | Short Circuit Protection | Hiccup Mode |
| Efficiency | EISA2007, CEC Efficiency Level V, EU (EC) No 278/2009 Phase II | Topology | Switching – Fixed Frequency Flyback |
| Output Voltage | See chart | Safety Standards | EN/IEC/CSA/UL60601-1 |
| Output Power | See chart | EMC | See chart below |
| Ripple and Noise | 1% pk-pk max., 20MHz BW | Dielectric Withstand | Input-Output: 5,656 Vdc, Input-GND: 1,500 Vac, Output-GND: 500Vdc |
| Line & Load Voltage Regulation | Line: +/- 1%, Load: +/-5% | Operating Temperature | 0° to 40°C, no derating |
| Transient Response | 500µs max., 50% load step, typical | Storage Temperature | -30 to +85°C |
| Minimum Load | Not required | Relative Humidity | 5% to 95%, non-condensing |
| Case Material | Black 94V0 Polycarbonate | Altitude | 0 to 10,000 ft |
| Case Dimensions | See outline drawing | Output Cable | 5V – 9V models: #18AWG (UL2464), 1,200mm, 4 conductor 12V – 15V models: #18AWG (UL2464), 1,500mm, 4 conductor 18V – 48V models: #18AWG (UL2464), 1,500mm, 2 conductor |
| Weight | 400g | Output Connector | 2.5mm barrel type (Ault #3), center contact positive (+) |

EMC Specifications

| | |
|---|---|
| Conducted Emissions | EN55011 Class B, FCC Part 15, Class B. |
| Radiated Emissions | EN55011 Class B, FCC Part 15, Class B. |
| Line Frequency Harmonics | EN61000-3-2, Class A |
| Voltage Fluctuations/Flicker | EN61000-3-3 |
| Static Discharge Immunity | EN61000-4-2, 6kV Contact Discharge, 8kV air discharge |
| Radiated RF Immunity | EN61000-4-3, 3V/m. |
| EFT/Burst Immunity | EN61000-4-4, 2kV/5kHz. |
| Line Surge Immunity | EN61000-4-5, 1kV differential, 2kV common-mode |
| Conducted RF Immunity | EN61000-4-6, 3Vrms |
| Power Frequency Magnetic Field Immunity | EN61000-4-8, 3A/m |
| Voltage Dip Immunity | EN61000-4-11, Criteria A |

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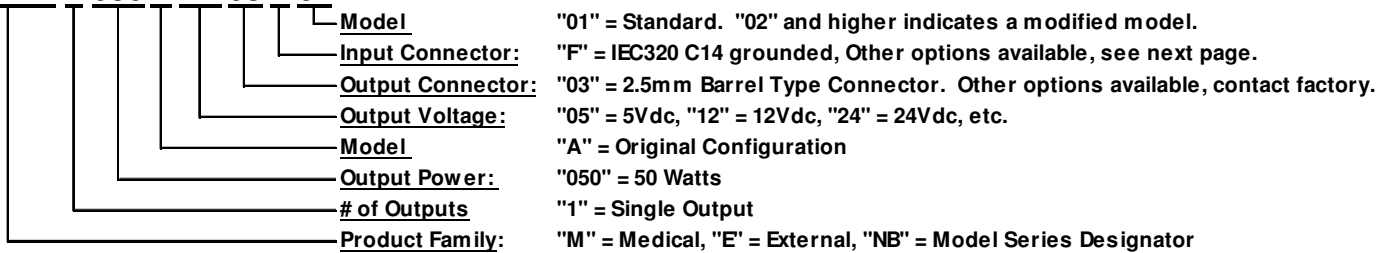
3 Year Warranty

| Model Number | Volts (V) | Output Current (max) | Max Watts | Ripple (Vp-p max) |
|------------------|-----------|----------------------|-----------|-------------------|
| MENB1050A0503F01 | 5 V | 6.00 A | 30.0 W | 50mV |
| MENB1050A0903F01 | 9 V | 5.00 A | 45.0 W | 90mV |
| MENB1050A1203F01 | 12 V | 4.20 A | 50.4 W | 120mV |
| MENB1050A1503F01 | 15 V | 3.36 A | 50.4 W | 150mV |
| MENB1050A1803F01 | 18 V | 2.80 A | 50.4 W | 180mV |
| MENB1050A2403F01 | 24 V | 2.10 A | 50.4 W | 240mV |

Notes: Part numbers above include #3 output connector and IEC320 C14 grounded input receptacle. See below for other options.

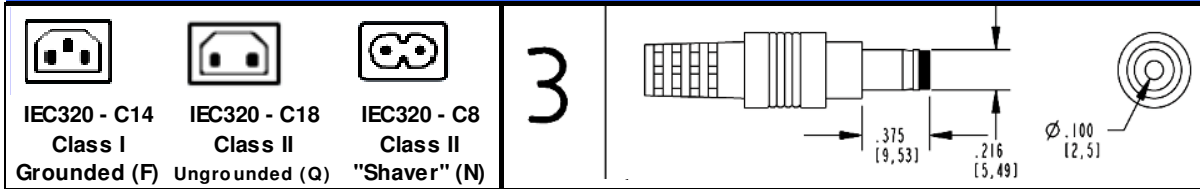
Model Number Key

MENB 1 050 A VV 03 F 01



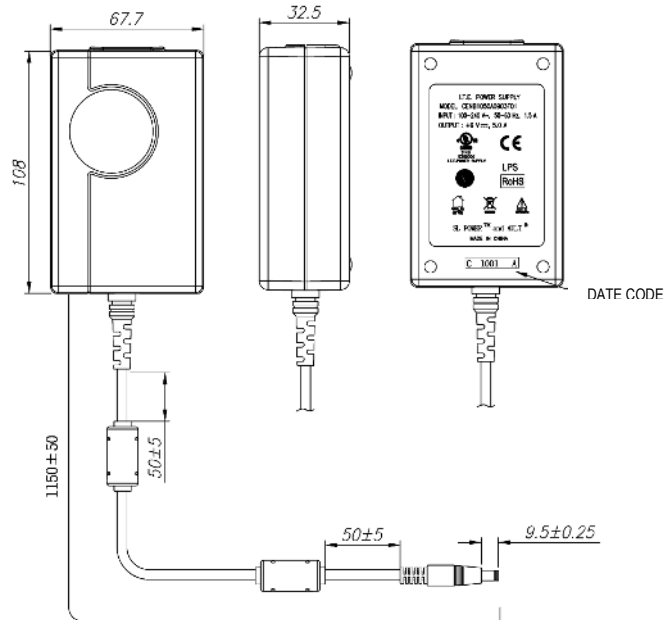
Input Receptacle Options

Output Connector



Notes: 1. Contact factory for "Q" and "N" option availability.

Outline Drawing



Dimensions are in mm (Cable length is 1500mm on 12V thru 24V models)

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