

# MENB1100

Universal Input 100 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
- Desktop Style
- 12V to 24V Single Output Models, up to 100W
- Modified and Custom Designs Available
- Regulated Output with Low Ripple
- Impact-Resistant Polycarbonate Enclosure
- No Load Power Consumption <0.5W
- Meets UL/EN/IEC60601-1



## Specifications

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

<b>AC Input</b>	100-240Vac, +/-10%, 47-63 Hz, 1Ø	<b>MTBF</b>	100,000 hours calculated
<b>Input Current</b>	100 Vac: 2.2 A	<b>Hold-up Time</b>	18 ms min. @ 115Vac, 60 ms min. @ 230 Vac
<b>Inrush Current</b>	60A peak @ 264Vac, cold start	<b>Overload Protection</b>	Hiccup Mode
<b>Input Fuse</b>	3.15A, 250V Internal Primary Current Fuse provided	<b>Short Circuit Protection</b>	Hiccup Mode
<b>Efficiency</b>	Meets International Efficiency Level V	<b>Topology</b>	Switching – Fixed Frequency Flyback
<b>Output Voltage</b>	See chart	<b>Safety and EMC Approvals</b>	EN/IEC/CSA/UL60601-1 EMC: See chart
<b>Output Power</b>	See chart	<b>Dielectric Withstand</b>	Input-Output: 5,656Vdc Input-GND: 1,500 Vac, Output-GND: 500Vdc
<b>Ripple and Noise</b>	1% pk-pk max., 20MHz BW	<b>Operating Temperature</b>	0° to 40°C, no derating
<b>Line/Load Regulation</b>	Excluding Cord: Line: +/- 1%, Load: +/-5%	<b>Storage Temperature</b>	-30 to +85°C
<b>Transient Response</b>	500µs max., 50% load step, typical	<b>Relative Humidity</b>	5% to 95%, non-condensing
<b>Minimum Load</b>	Not required	<b>Altitude</b>	0 to 10,000 ft
<b>Case Material</b>	Black 94V0 Polycarbonate	<b>Output Connections</b>	Cable: 18AWG, 1,500mm, 4 conductor Connector: Ault #3, 2.5mm or Ault #51, 6-pin Molex
<b>Case Dimensions</b>	150mm x 87mm x 47mm, see mechanical drawing	<b>Weight</b>	700g

## EMI/EMC Compliance

<b>Conducted Emissions</b>	FCC Part 15, Class B, EN55011 Class B, EN55024
<b>Radiated Emissions</b>	FCC Part 15, Class B, EN55011 Class B, EN55024
<b>Voltage Fluctuations</b>	EN61000-3-3, Line Flicker
<b>Static Discharge Immunity</b>	EN61000-4-2, 6kV Contact Discharge, 8kV air discharge
<b>Radiated RF Immunity</b>	EN61000-4-3, 3V/m.
<b>EFT/Burst Immunity</b>	EN61000-4-4, 2kV/5kHz..
<b>Line Surge Immunity</b>	EN61000-4-5, 1kV differential, 2kV common-mode
<b>Conducted RF Immunity</b>	EN61000-4-6, 3Vrms
<b>Power Frequency Magnetic Field Immunity</b>	EN61000-4-8, 3A/m
<b>Voltage Dip Immunity</b>	EN61000-4-11 crit. A, 100Vac 60Hz, 40%/5 cycles with 70% full load.
<b>Line Frequency Harmonics</b>	EN61000-3-2, Class A

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Model Number	Volts (V)	Output Current (max)	Max Watts	Ripple (Vp-p max)
MENB1100A1251F01	12 V	7.5 A	90 W	120mV
MENB1100A1551F01	15 V	6.4 A	96 W	150mV
MENB1100A1803F01	18 V	5.6 A	101 W	180mV
MENB1100A2403F01	24 V	4.2 A	101 W	240mV

## Model Number Key

**MENB 1 100 A VV 51 F 01**

Model	"01" = Standard. "02" and higher indicates a modified model.
Input Connector:	"F" = IEC320 C14 grounded, Other options available, see below
Output Connector:	"51" = Molex 39-01-2060 or equivalent. Other options available, contact factory.
Output Voltage:	"05" = 5Vdc, "12" = 12Vdc, "24" = 24Vdc, etc.
Model	"A" = Original Configuration
Output Power:	"100" = 100 Watts
# of Outputs	"1" = Single Output
Product Family:	"M" = Medical, "E" = External, "NB" = Model Series Designator

## Input Receptacle

## Output Connector

## Output Connector (12V & 15V models)

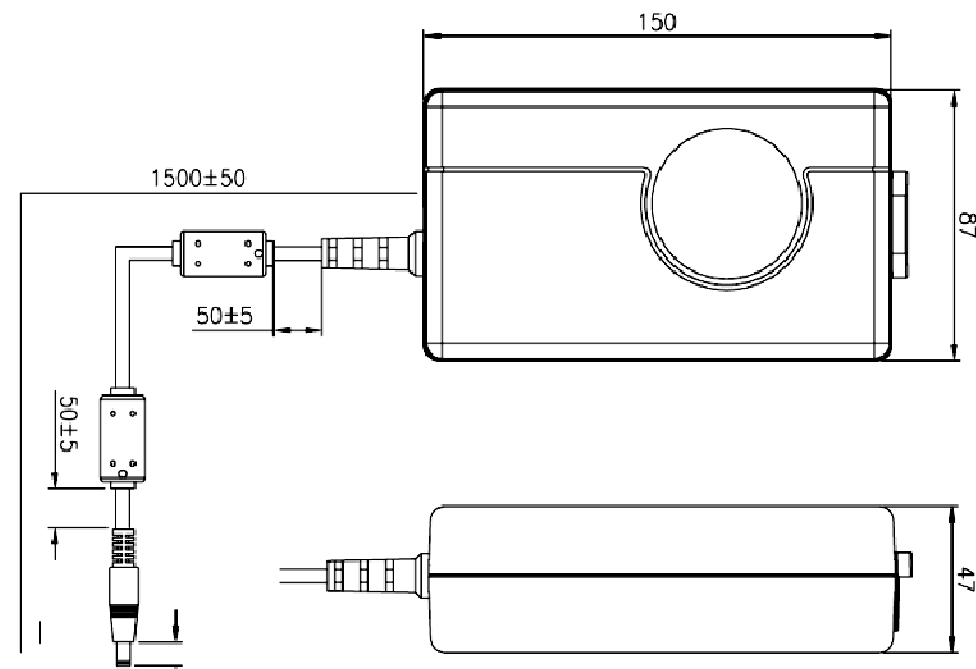
 IEC320 C14 - Class I Grounded (F)	3	 Dimensions: 37.5 (1.476), 21.6 (0.850), 100 (3.937)	51	 Pinout: Pin 1, 4 (+); Pin 3, 6 (-)
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"#3" Connector is 2.5mm barrel type, center (+)

"#51" Connector is Molex 39-01-2060 or equivalent.

"#51" Connector Pinout: Pins 1, 4: (+), Pins 3, 6: (-). Mate = Molex 39-01-2061 or equiv.

## Outline Drawing



Dimensions are in mm. "#3" Connector shown.