

# MENB1150

Universal Input 150 Watt Series



Medical Switch-Mode Power Supply

3 Year Warranty

- 90-264VAC Universal Input
- Meets Efficiency Level V, EU (EC) No 278/2009 Phase II
- Meets UL/EN/IEC60601-1, 3<sup>rd</sup> Edition, 2xMOPP
- Desktop Style
- 12V to 24V Single Output Models, up to 150W
- Modified and Custom Designs Available
- Regulated Output with Low Ripple
- Impact-Resistant Polycarbonate Enclosure
- No Load Power Consumption <0.5W



International Safety Agency Approvals



## 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	100 Vac: 2.5 A	Hold-up Time	18 mS min @ 110Vac, 21mS min @ 240 Vac
Inrush Current	60A peak @ 264Vac, cold start	Turn-on Time	2 sec max @ 110/240Vac
Input Fuse	3.15A, 250V Internal Primary Current Fuse provided	Output Rise Time	200mS max @ 11//240Vac
Efficiency	Meets Efficiency Level V, ErPII	Overload Protection	Hiccup Mode
Output Voltage	See chart	Short Circuit Protection	Hiccup Mode
Output Power	See chart	Topology	Switching – Fixed Frequency Flyback
Ripple and Noise	1% pk-pk max., 20MHz BW	Safety and EMC Approvals	EN/IEC/CSA/UL60601-1, 3 <sup>rd</sup> Edition EMC: See chart
Line/Load Regulation	Excluding Cord: Line: +/- 1%, Load: +/-5%	Dielectric Withstand	Input-Output: 2 x MOPP Input-GND:1 x MOPP, Output-GND: 500Vdc
Transient Response	500µs max., 50% load step, typical	Operating Temperature	0° to 40°C, no derating
Minimum Load	Not required	Storage Temperature	-30 to +85°C
Case Material	Black 94V0 Polycarbonate	Relative Humidity	5% to 95%, non-condensing
Case Dimensions	212mm x 67mm x 48mm, see mechanical drawing	Altitude	0 to 10,000 ft
Weight	700g	Output Connections	Cable: 18AWG UL2464, 1200mm, 4 conductor Connector: Ault #51, 6-pin Molex, other options available

## EMI/EMC Compliance

Conducted Emissions	EN55011/22, Class B
Radiated Emissions	EN55011/22, Class B
Line Frequency Harmonics	EN61000-3-2
Voltage Fluctuations	EN61000-3-3, Line Flicker
Static Discharge Immunity	EN61000-4-2, 6kV Contact Discharge, 8kV air discharge, Criteria A
Radiated RF Immunity	EN61000-4-3, 3V/m, Criteria A
EFT/Burst Immunity	EN61000-4-4, 2kV/5kHz, Criteria A
Line Surge Immunity	EN61000-4-5, 1kV diff., 2kV common-mode, Criteria A
Conducted RF Immunity	EN61000-4-6, 3Vrms, Criteria A
Power Frequency Magnetic Field Immunity	EN61000-4-8, 3A/m, Criteria A
Voltage Dip Immunity	EN61000-4-11, 100% dip, 10mS, Crit. A; 60% dip, 100mS, Crit. A; 30% dip, 500mS, Crit. C; 100%, 5000mS, Crit. C.

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Model Number	Volts (V)	Output Current (max)	Max Watts	Ripple (Vp-p max)
MENB1150A1251F01	12 V	12.5 A	150 W	120mV
MENB1150A1551F01	15 V	10.0 A	150 W	150mV
MENB1150A1851F01	18 V	8.3 A	150 W	180mV
MENB1150A2451F01	24V	6.25 A	150 W	240mV

## Model Number Key

**MENB 1 150 A 12 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. Other options available.
Output Voltage:	"12" = 12Vdc, "15" = 15Vdc, etc.
Model	A = Original Configuration
Output Power:	"150" = 150 Watts
# of Outputs	"1" = Single Output
Product Family:	"M" = Medical, "E" = External, "NB" = Model Series Designator

## Connector Information

Input Connector Options	DC Output Connector		
	Output Connector Options	Pinout	Mating Connector
<u>Class I (grounded) Inlet:</u> "F" = IEC60320 C14 <u>Class II (ungrounded) Inlets:</u> "N" = IEC60320 C8 "Q" = IEC60320 C18	"51" = 6 pin, Molex 39-01-2060 or equiv.	Pins 1,4: +Vout Pins 3,6: -Vout Pins 2,4: NC	Molex 39-01-3063 or equiv.

## Outline Drawing

