

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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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

Model

Input Connector:

Output Connector:

Output Voltage:

Model

Output Power:

of Outputs

Product Family:

"01" = Standard. "02" and higher indicates a modified model.

"F" = IEC320 C14 grounded, Other options available, see next page.

"03" = 2.5mm Barrel Type Connector. Other options available, contact factory.

"05" = 5Vdc, "12" = 12Vdc, "24" = 24Vdc, etc.

"A" = Original Configuration

"050" = 50 Watts

"1" = Single Output

"M" = Medical, "E" = External, "NB" = Model Series Designator

Input Receptacle Options



IEC320 - C14
Class I
Grounded (F)



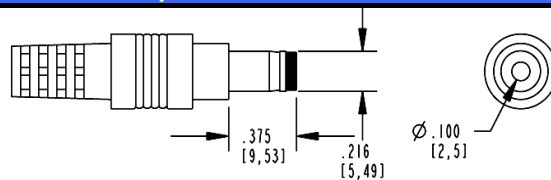
IEC320 - C18
Class II
Ungrounded (Q)



IEC320 - C8
Class II
"Shaver" (N)

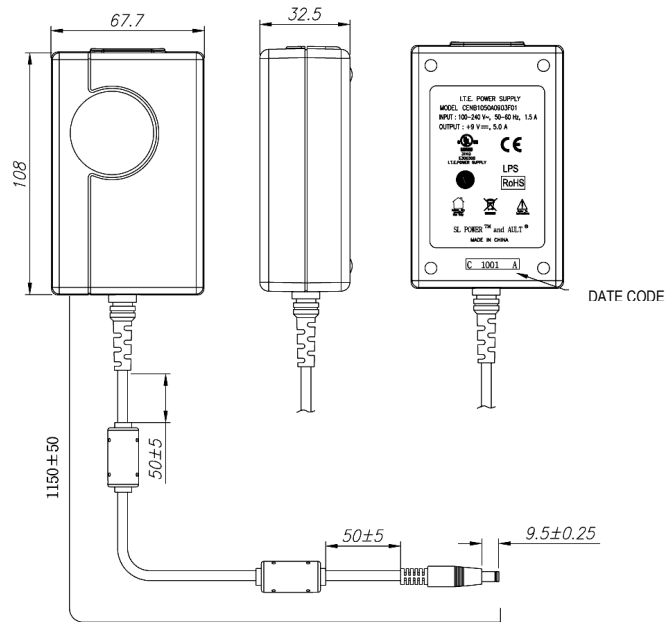
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Output Connector



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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