

MENB1030

Universal 30 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, 3rd Edition
- 5V to 48V outputs, up to 32W
- Modified and Custom Designs Available
- Regulated Output with Low Ripple
- Impact-Resistant Polycarbonate Enclosure
- No load Power Consumption <0.3W
- Desktop & Wall Plug Styles



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
Input Current	100VAC: 0.9A
Inrush Current	60A peak, 264Vac, cold start
Input Fuse	3.15A Internal Primary Current Fuse is provided
Efficiency	Meets EISA2007, CEC Efficiency Level V, and EU(EC) No. 278/2009 Phase II requirements
Output Voltage	See chart
Output Power	See chart
Ripple and Noise	1% pk-pk max., 20MHz BW
Line & Load Voltage Regulation	Line: +/- 1%, Load: +/-5%
Transient Response	500µs max., 50% load step, typical
Minimum Load	Not required
Case Material:	Black 94V0 Polycarbonate
Case Dimensions:	95 x 54 x 31mm. See outline drawing Weight = 200g
Output Connector:	2.5mm barrel type (Ault #3) connector, center contact (+). Other options available

MTBF	>100,000 hours calculated
Hold-up Time	18 ms min. @ 115VAC, 60 msec @ 230VAC
Turn-on Time	2 seconds, max.
Topology	Switching – Fixed Frequency Flyback
Overload Protection	Hiccup Mode
Short Circuit Protection	Hiccup Mode
EMC	See chart below
Safety Standards	EN/IEC/CSA/UL60601-1, 3rd Edition
Dielectric Withstand	Input-Output: 5,656VDC, Input-GND: 1,500 Vac, Output-GND: 500Vdc
Operating Temperature	0° to 40°C, no derating
Storage Temperature	-30 to +85°C
Relative Humidity	5% to 95%, non-condensing
Altitude	0 to 10,000 ft
Output Cable:	5V – 9V models: #18AWG (SPT-1), 1,500mm, 2 conductor 12V – 24V models: #18AWG (UL1185), 1,500mm, 2 conductor

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)
MENB1030A0503F01	5 V	4.00 A	20.0 W	50 mV
MENB1030A0703F01	7.5 V	3.00 A	22.5 W	75 mV
MENB1030A0903F01	9 V	3.00 A	27.0 W	90 mV
MENB1030A1203F01	12 V	2.50 A	30.0 W	120 mV
MENB1030A1403F01	14 V	2.10 A	29.4 W	140 mV
MENB1030A1503F01	15 V	2.00 A	30.0 W	150 mV
MENB1030A1803F01	18 V	1.67 A	30.0 W	180 mV
MENB1030A2403F01	24 V	1.33 A	31.9 W	240 mV
MENB1030A4803F01	48 V	0.63 A	30.0 W	480 mV

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

Model Number Key

MENB 1 030 A VV 03 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:	"03" = 2.5mm Barrel Type Connector. Other options available, contact factory.
Output Voltage:	"05" = 5Vdc, "12" = 12Vdc, "24" = 24Vdc, etc.
Model	"A" = Original Configuration
Output Power:	"030" = 30 Watts
# of Outputs	"1" = Single Output
Product Family:	"M" = Medical, "E" = External, "NB" = Model Series Designator

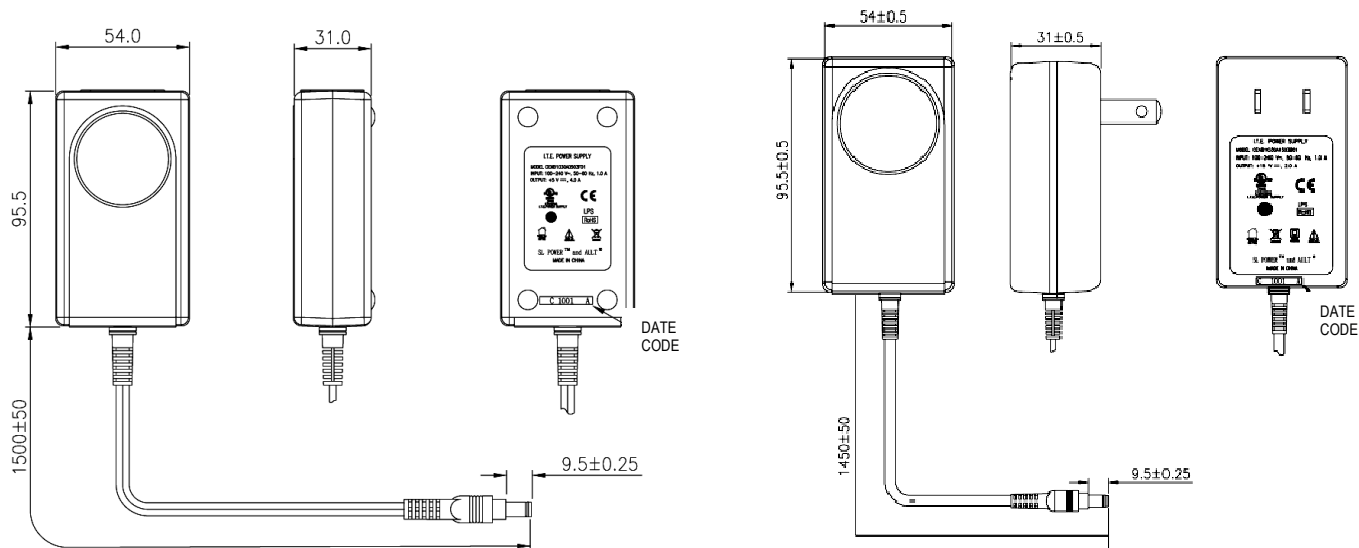
AC Input Receptacle Options

Desktop			Wall-Plug				
IEC320 - C14 Class I Grounded (F)	IEC320 - C18 Class II Ungrounded (Q)	IEC320 - C8 Class II "Shaver" (N)	N. America Japan Interchangeable (C)	N. America Japan Fixed (B)	Europe Fixed (M)	United Kingdom Fixed (G)	Australia Fixed (H)
Notes: 1. For desktop options, choose applicable letter above. 2. For Wall-Plug options, choose the applicable letter above and the unit will be fitted with the receptacle chosen. The N. A. blade version (C) will be an interchangeable blade. The other options (B), (M), (G), and (H) will be fixed blades molded in the case. 3. Blade Kit is available which will include one each of a EU, UK, and Australian blade. Kit part # is KT1027K. These can be used with the (C) version, to allow blades to be changed.							

Output Connector

Notes: 1. Ault #3 Connector, center contact (+). 2. Connector is Switchcraft 760 plug or equivalent. Mating connector is Switchcraft 712A or equivalent. 3. Other connector options are available. Contact your local SL Power Representative for details.

Outline Drawings



Desktop Style

Wall-plug Style ("B" Option Shown)

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SL Power:

<u>MENB1030A0503B01</u>	<u>MENB1030A0503F01</u>	<u>MENB1030A0503N01</u>	<u>MENB1030A0703B01</u>	<u>MENB1030A0703F01</u>
<u>MENB1030A0703N01</u>	<u>MENB1030A0903B01</u>	<u>MENB1030A0903F01</u>	<u>MENB1030A0903N01</u>	<u>MENB1030A1203B01</u>
<u>MENB1030A1203F01</u>	<u>MENB1030A1203N01</u>	<u>MENB1030A1403B01</u>	<u>MENB1030A1403F01</u>	<u>MENB1030A1403N01</u>
<u>MENB1030A1503B01</u>	<u>MENB1030A1503F01</u>	<u>MENB1030A1503N01</u>	<u>MENB1030A1803B01</u>	<u>MENB1030A1803F01</u>
<u>MENB1030A1803N01</u>	<u>MENB1030A2403B01</u>	<u>MENB1030A2403F01</u>	<u>MENB1030A2403N01</u>	<u>MENB1030A4803B01</u>
<u>MENB1030A4803F01</u>	<u>MENB1030A4803N01</u>	<u>MENB1030A0503C01</u>	<u>MENB1030A0703C01</u>	<u>MENB1030A0903C01</u>
<u>MENB1030A1203C01</u>	<u>MENB1030A1403C01</u>	<u>MENB1030A1503C01</u>	<u>MENB1030A1803C01</u>	<u>MENB1030A2403C01</u>
<u>MENB1030A4803C01</u>				