

# 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, 3<sup>rd</sup> 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.

<b>AC Input</b>	100-240VAC, +/-10%, 47-63 Hz, 1Ø	<b>MTBF</b>	>100,000 hours calculated
<b>Input Current</b>	100VAC: 0.9A	<b>Hold-up Time</b>	18 ms min. @ 115VAC, 60 msec @ 230VAC
<b>Inrush Current</b>	60A peak, 264Vac, cold start	<b>Turn-on Time</b>	2 seconds, max.
<b>Input Fuse</b>	3.15A Internal Primary Current Fuse is provided	<b>Topology</b>	Switching – Fixed Frequency Flyback
<b>Efficiency</b>	Meets EISA2007, CEC Efficiency Level V, and EU(EC) No. 278/2009 Phase II requirements	<b>Overload Protection</b>	Hiccup Mode
<b>Output Voltage</b>	See chart	<b>Short Circuit Protection</b>	Hiccup Mode
<b>Output Power</b>	See chart	<b>EMC</b>	See chart below
<b>Ripple and Noise</b>	1% pk-pk max., 20MHz BW	<b>Safety Standards</b>	EN/IEC/CSA/UL60601-1, 3rd Edition
<b>Line &amp; Load Voltage Regulation</b>	Line: +/- 1%, Load: +/-5%	<b>Dielectric Withstand</b>	Input-Output: 5,656VDC, Input-GND: 1,500 Vac, Output-GND: 500Vdc
<b>Transient Response</b>	500µs max., 50% load step, typical	<b>Operating Temperature</b>	0° to 40°C, no derating
<b>Minimum Load</b>	Not required	<b>Storage Temperature</b>	-30 to +85°C
<b>Case Material:</b>	Black 94V0 Polycarbonate	<b>Relative Humidity</b>	5% to 95%, non-condensing
<b>Case Dimensions:</b>	95 x 54 x 31mm. See outline drawing Weight = 200g	<b>Altitude</b>	0 to 10,000 ft
<b>Output Connector:</b>	2.5mm barrel type (Ault #3) connector, center contact (+). Other options available	<b>Output Cable:</b>	5V – 9V models: #18AWG (SPT-1), 1,500mm, 2 conductor 12V – 24V models: #18AWG (UL1185), 1,500mm, 2 conductor

## EMC Specifications

<b>Conducted Emissions</b>	EN55011 Class B, FCC Part 15, Class B.
<b>Radiated Emissions</b>	EN55011 Class B, FCC Part 15, Class B.
<b>Line Frequency Harmonics</b>	EN61000-3-2, Class A
<b>Voltage Fluctuations/Flicker</b>	EN61000-3-3
<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, Criteria A

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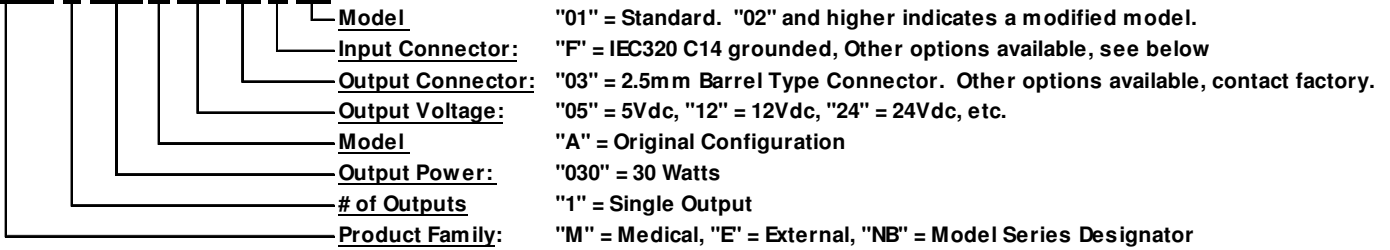
3 Year Warranty

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

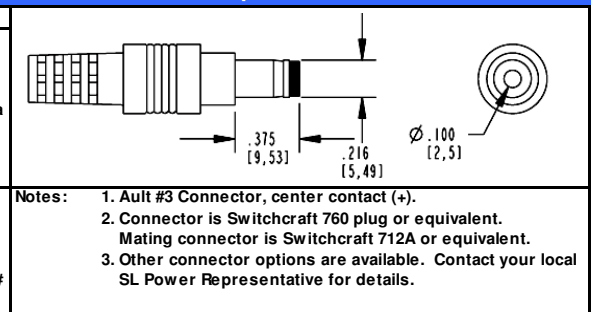
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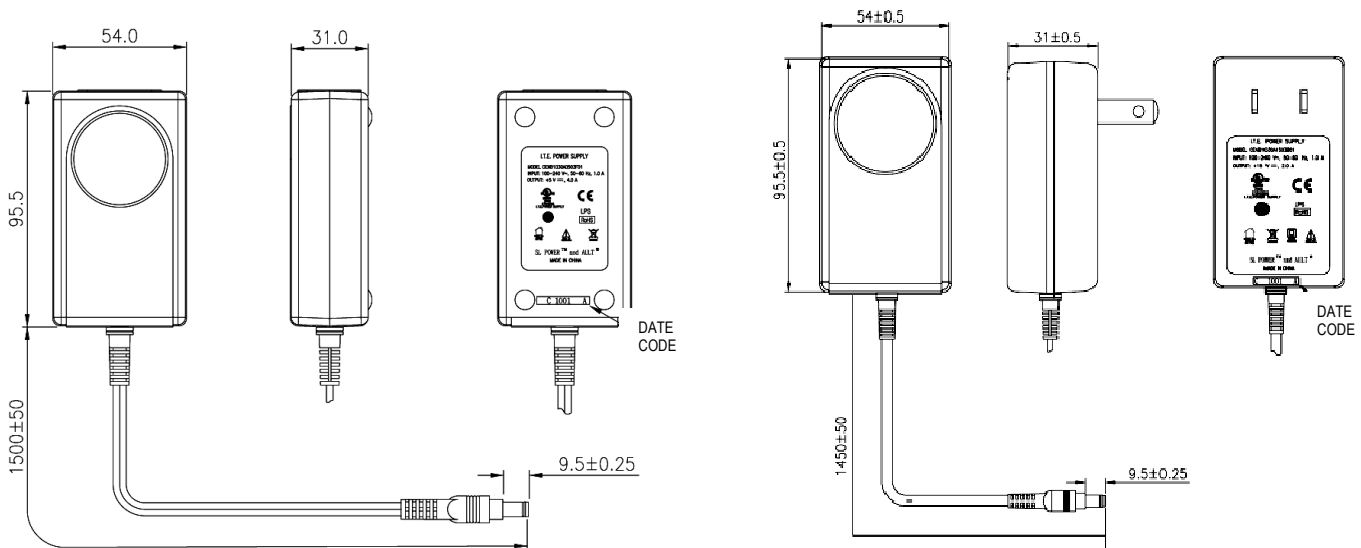
### AC Input Receptacle Options

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



### Outline Drawings



Desktop Style

Wall-plug Style ("B" Option Shown)

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