

SL POWER MENB1010 Series

10 W Single Output External Power Adapter Medical Grade



Advanced Energy's SL Power MENB1010 series of desktop AC-DC external power adapter comprises four output models. All models feature medical safety approvals and accept a universal input of 100 to 240 VAC. MENB10 series power adapters provide up to 10 Watts of output power with Impact-Resistant Polycarbonate enclosure and are ideal for applications that are used in environments where AC mains power may be noisy or unstable and equipment shutdown is not an option.

AT A GLANCE

Total Power

10 Watts

Input Voltage

100 to 240 VAC

of Outputs

Single



SPECIAL FEATURES

- Approved to EN/IEC/UL60601-1, 3rd edition with isolation levels which satisfy the 2 MOPP requirements
- Desktop Wall Plug Styles
- Up to 10 W of AC-DC Power
- Impact-Resistant Polycarbonate Enclosure
- Meets EISA2007, CEC Efficiency Level
 V, EU (EC) No 278/2009 Phase II
- No load Power Consumption <0.3W
- 5V to 24V Single Output Models, up to 12W
- >100,000 Hours MTBF
- 3 Years Warranty
- Limited Power Source
- Regulated Output with Low Ripple
- RoHS Compliant

SAFETY

IEC/EN/CSA/UL60601-1, 3rd editionCE Mark

ELECTRICAL SPECIFICATIONS

Input				
Input Range	100 to 240 VAC, ±10%, 47 to 63 Hz, 1Ø			
Input Current	0.27 A @ 100 VAC			
Inrush Current	60 A max., cold start @ 264 VAC input			
Input Fuses	Internal Primary Current Fuse provided (1A, 250VAC rated)			
Efficiency	Meets EISA2007, CEC Efficiency Level V, EU (EC) No 278/2009 Phase II			
No Load Input Power	<0.3 W			
Тороlоду	Switching – Fixed Frequency Flyback			
Output				
Output Voltage	See models chart on page 4			
Output Power	See models chart for specific voltage model ratings			
Turn On Time	Less than 1 sec @ 115 VAC, full load			
Hold Up Time	18 mS min. @ 115Vac, 60 mS min. @ 230 Vac			
Ripple and Noise	1% pk-pk max., 20MHz BW			
Line & Load Voltage Regulation	Line: +/- 1%, Load: +/-5%			
Minimum Load	Not required			
Output Cable	#20AWG (UL2468), 1500mm, 2 conductor			
Output Connector	2.5mm barrel type (Ault #3), center contact (+) Other options available, contact the factory for details			
Protection				
Overload Protection	Hiccup Mode			
Short Circuit Protection	Hiccup Mode			
EMC Specifications				
Safety Standards	Approved to EN/IEC/CSA/UL60601-1, 3rd Edition			
Safety Standards Conducted Emissions	Approved to EN/IEC/CSA/UL60601-1, 3rd Edition EN55011 Class B, FCC Part 15, Class B.			
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Conducted Emissions	EN55011 Class B, FCC Part 15, Class B.			
Conducted Emissions Radiated Emissions	EN55011 Class B, FCC Part 15, Class B. EN55011 Class B, FCC Part 15, Class B.			
Conducted Emissions Radiated Emissions Line Frequency Harmonics	EN55011 Class B, FCC Part 15, Class B. EN55011 Class B, FCC Part 15, Class B. EN61000-3-2, Class A			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker	EN55011 Class B, FCC Part 15, Class B. EN55011 Class B, FCC Part 15, Class B. EN61000-3-2, Class A EN61000-3-3			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker Static Discharge Immunity	EN55011 Class B, FCC Part 15, Class B. EN55011 Class B, FCC Part 15, Class B. EN61000-3-2, Class A EN61000-3-3 EN61000-4-2, 6kV Contact Discharge, 8kV air discharge			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker Static Discharge Immunity Radiated RF Immunity	EN55011 Class B, FCC Part 15, Class B. EN55011 Class B, FCC Part 15, Class B. EN61000-3-2, Class A EN61000-3-3 EN61000-4-2, 6kV Contact Discharge, 8kV air discharge EN61000-4-3, 3V/m			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker Static Discharge Immunity Radiated RF Immunity EFT/Burst Immunity	EN55011 Class B, FCC Part 15, Class B.EN55011 Class B, FCC Part 15, Class B.EN61000-3-2, Class AEN61000-3-3EN61000-4-2, 6kV Contact Discharge, 8kV air dischargeEN61000-4-3, 3V/mEN61000-4-4, 2kV/5kHz.			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker Static Discharge Immunity Radiated RF Immunity EFT/Burst Immunity Line Surge Immunity	EN55011 Class B, FCC Part 15, Class B.EN55011 Class B, FCC Part 15, Class B.EN61000-3-2, Class AEN61000-3-3EN61000-4-2, 6kV Contact Discharge, 8kV air dischargeEN61000-4-3, 3V/mEN61000-4-4, 2kV/5kHz.EN61000-4-5, 1kV differential, 2kV common-mode			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker Static Discharge Immunity Radiated RF Immunity EFT/Burst Immunity Line Surge Immunity Conducted RF Immunity Power Frequency Magnetic Field	EN55011 Class B, FCC Part 15, Class B.EN55011 Class B, FCC Part 15, Class B.EN61000-3-2, Class AEN61000-3-3EN61000-4-2, 6kV Contact Discharge, 8kV air dischargeEN61000-4-3, 3V/mEN61000-4-4, 2kV/5kHz.EN61000-4-5, 1kV differential, 2kV common-modeEN61000-4-6, 3Vrms			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker Static Discharge Immunity Radiated RF Immunity EFT/Burst Immunity Line Surge Immunity Conducted RF Immunity Power Frequency Magnetic Field Immunity	EN55011 Class B, FCC Part 15, Class B.EN55011 Class B, FCC Part 15, Class B.EN61000-3-2, Class AEN61000-3-3EN61000-4-2, 6kV Contact Discharge, 8kV air dischargeEN61000-4-3, 3V/mEN61000-4-4, 2kV/5kHz.EN61000-4-5, 1kV differential, 2kV common-modeEN61000-4-6, 3VrmsEN61000-4-8, 3A/m			
Conducted Emissions Radiated Emissions Line Frequency Harmonics Voltage Fluctuations/Flicker Static Discharge Immunity Radiated RF Immunity EFT/Burst Immunity Line Surge Immunity Conducted RF Immunity Power Frequency Magnetic Field Immunity Voltage Dip Immunity	EN55011 Class B, FCC Part 15, Class B.EN55011 Class B, FCC Part 15, Class B.EN61000-3-2, Class AEN61000-3-3EN61000-4-2, 6kV Contact Discharge, 8kV air dischargeEN61000-4-3, 3V/mEN61000-4-4, 2kV/5kHz.EN61000-4-5, 1kV differential, 2kV common-modeEN61000-4-6, 3VrmsEN61000-4-8, 3A/m			



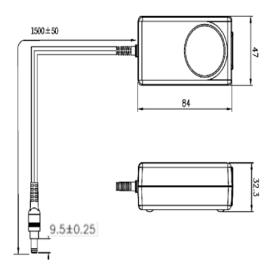
ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C to 40°C. no derating			
Storage Temperature	-30°C to +85°C			
Relative Humidity	5% to 95%, non-condensing			
Weight	110 grams			
Case Material	Black 94V-0 Polycarbonate			
Altitude	Operating: -500 to 1000 ft Non-operating: -500 ft to 40000 ft			
MTBF	>100,000 hours (calculated)			
Dimensions (W x L x H)	84mm x 47mm x 32mm			

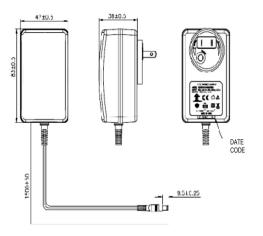
Note:

All specifications are typical at nominal input, full load, at 25°C ambient unless noted.

MECHANICAL DRAWING



Desktop Style



Wall-Plug Style



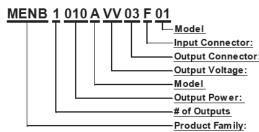
ORDERING INFORMATION

Model Number	Volts	Output Current	Output Power	Ripple & Noise ¹	Line Regulation	Load Regulation
MENB1010A0503F01	5.0 V	2.00 A	10.0 W	50mV pk-pk	± 1%	± 5%
MENB1010A0603F01	6.0 V	2.00 A	12.0 W	60mV pk-pk	± 1%	± 5%
MENB1010A0703F01	7.5 V	1.60 A	12.0 W	75mV pk-pk	± 1%	± 5%
MENB1010A0903F01	9.0 V	1.10 A	10.0 W	90mV pk-pk	± 1%	± 5%
MENB1010A1203F01	12.0 V	1.00 A	12.0 W	120mV pk-pk	± 1%	± 5%
MENB1010A1503F01	15.0 V	0.80 A	12.0 W	150mV pk-pk	± 1%	± 5%
MENB1010A1603F01	16.0 V	0.75 A	12.0 W	160mV pk-pk	± 1%	± 5%
MENB1010A1803F01	18.0 V	0.67 A	12.0 W	180mV pk-pk	± 1%	± 5%
MENB1010A2403F01	24.0 V	0.50 A	12.0 W	240mV pk-pk	± 1%	± 5%
MENB1010A4803F01	48.0 V	0.25 A	12.0 W	480mV pk-pk	± 1%	± 5%

Notes:

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

Model Number Key



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

Input Connector: "F" = IEC320 C14 grounded, Other options available, see below

<u>Output Connector:</u> "0β" = 2.5mm Barrel Type Connector. Other options available, contact factory. <u>Output Voltage:</u> "05" = 5Vdc, "12" = 12Vdc, "24" = 24Vdc, etc.

"A" = Original Configuration

"010" = 10 Watts

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"1" = Single Output
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"M" = Medical, "E" = External, "NB" = Model Series Designator

AC Input Receptacle Options								Output Connector
	Desktop		Wall-Plug					
IEC320 - C14 Class I Grounded (F)	IEC 320 - C18 Class II Ungrounded (Q)	IEC320 - C8 Class II "Shaver" (N)	N. America Japan Interchangable (B)	N. America Japan Fixed (C)	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 (B) will be an interchangeable blade. The other options (C), (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 (B) version, to allow blades to be changed.							options	 Ault #3 Connector, center contact(+). Connector is Switchcraft 760 plug or equivalent.Mating connector is Switchcraft 712A or equivalent. Other connector options are available. Contact your localSL Power Representative for details.





Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

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