

MENT1150

Universal Input 150 Watt Series



Medical / ITE Switch-Mode Power Supply

3 Year Warranty

- 100-240VAC Universal Input
- Meets EISA2007, CEC Efficiency Level V, EU (EC) No 278/2009 Phase II
- Desktop Style with LED Power-On indicator
- 12V to 48V 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
- Meets UL/EN/IEC60601-1 & 60950-1 2nd edition



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	> 100K hours (calculated, 25°C at full load)
Input Current	115VAC: 3A, 230VAC: 1.5A	Hold-up Time	20 ms min. @ 115VAC
Inrush Current	75A peak @ 264Vac, cold start	Overvoltage Protection	130% of nominal output voltage
Input Fuse	4.0A, 250V Internal Primary Current Fuse provided	Overload Protection	120-180% of full rated load, auto-recovery
Efficiency	Meets International Efficiency Level V	Short Circuit Protection	Provided with no damage to supply
Output Voltage	See chart	Overtemperature Protection	Latched, requires input recycling
Output Power	See chart	Input Harmonics	Meets IEC61000-3-2
Ripple and Noise	1% pk-pk max., 20MHz BW	Safety Standards	IEC/EN/UL60601-1 & EN/IEC/UL60950-1 2 nd edition
Line/Load Regulation	Including Cord: Line: +/- 1%, Load: +/-5%	Switching Frequency	40kHz to 130kHz, variable
Transient Response	Maximum deviation of 5% with 25% to 75% load change and 0.2A/uSec slew rate	Isolation	Input-Output: 4000VAC, Input-GND: 1500VAC, Output-GND: 700VDC
Minimum Load	Not required	Operating Temperature	0° to 40°C Full load Derate linearly to 40% of full rated load at 70°C
Case Material	Black 94V0 Polycarbonate	Temperature Coefficient	0.04% per °C, maximum
Case Dimensions	see mechanical drawing	Storage Temperature	-40°C to +85°C
Altitude	-500 to 10,000 ft, operating; -500 to 40,000 ft, non-operating	Relative Humidity	5% to 95%, non-condensing

EMI/EMC Compliance

Conducted Emissions	FCC Part 15 Subpart B, Class B, EN55011 Class B, EN55024
Radiated Emissions	FCC Part 15 Subpart B, Class B, EN55011 Class B, EN55024
Voltage Fluctuations	EN61000-3-3 Complies (dmax<6%)
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 differential, 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, 0% Vnominal, 0.5 cycle; 40% Vnominal, 5 cycles; 70% Vnominal, 25 cycles: Criteria A
Line Frequency Harmonics	EN61000-3-2, Class A, B, C & D

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Model Number	Volts (V)	Output Current (max)	Max Watts	Ripple (Vp-p max)
MENT1150A1251F01	12V	11.67 A	140W	120mV
MENT1150A1551F01	15V	9.33 A	140W	150mV
MENT1150A1851F01	18V	7.78 A	140W	180mV
MENT1150A2451F01	24V	6.25 A	150W	240mV
MENT1150A2851F01	28V	5.35 A	150W	280mV
MENT1150A4851F01	48V	3.12 A	150W	480mV

Model Number Key

MENT 1 150 A VV 51 F 01

Model	"01" = Standard. "02" and higher indicates a modified model.
Input Connector:	"F" = IEC320 C14 grounded, Other options available, contact the factory.
Output Connector:	"51" = Molex 39-01-3065 or equiv. Other options available, contact the factory.
Output Voltage:	"12" = 12Vdc, "24" = 24Vdc, etc.
Model	"A" = Original Configuration
Output Power:	"150" = 150 Watts
# of Outputs	"1" = Single Output
Product Family:	"M" = Medical, "E" = External, "NT" = Model Series Designator

Input Recept.	#3 Output Connector - 2.5mm barrel type, center (+)	#51 Output Connector - Molex 39-01-2060 or equiv.
 IEC320 - C14 Class I Grounded (F)	3	51
Mate = Molex 39-01-2061 or equiv.		

Outline Drawing

Connector Pinout		
Pin No.	Wire AWG & Color	Desig.
1	18AWG RED	+Vout
2	18AWG BLUE	GND
3	18AWG GREEN	GND
4	18AWG WHITE	+Vout
5	18AWG YELLOW	+Vout
6	18AWG BLACK	GND

Tolerance: 0.02" [0.5mm]