## **MWLT100 Series**

### **100W single output Medical AC/DC Power Supplies**

The MWLT100 Series of single output convection cooled products are one of the smallest and most efficient 100-watt power supply packages available in the industry today typically  $1/3^{rd}$  the size and 20% more efficient than leading competitors. Packing nearly 12 watts per cubic inch the MWLT100 Series features Universal AC inputs from 90v to 264v, measures a mere 2 inches x 4 inches x 1.07 inches, and has a rated efficiency of greater than 86%. It is configured in all popular single output voltages and its flexible design allows for simple modification to alternate voltages as required.

The MWLT1000 Series meets all medical EMC and safety specifications, and has a reliability rating of over 200,000 hours mean time between failure. The MWLT100 Series is produced with the traditional EOS red color heat sink signifying its medical market application.

Medical product applications for the MWLT100 family include: medical, dental and lab equipment and systems such as endoscopes, instruments, pumps, drips, blood and fluid analyzers, video systems, defibrillators, sleep apnea, nurse call stations and many other uses.





#### Features :

- > 100 W air cooled rating.
- Small 2x4x1 inch form factor.
- > High efficiency > 86%.
- > Single outputs.
- > Low conducted and radiated noise.
- > Medically Approved
- > Class 1 Product
- > Active PFC

Model Number	Output	Voltage / Current *	Voltage Set Point	Min. Load
MWLT100-1001	V1	12V@8.3A	12V	0. 1A
MWLT100-1002	V1	15V@6.67A	15V	0. 1A
MWLT100-1003	V1	24V@4.17A	24V	0. 1A
MWLT100-1004	V1	48V@2.08A	48V	0. 1A
VLT60CK Metal cover kit accessory				

INPUT SPECIFICATION		
AC Input	Universal	90 to 264VAC
DC Input		120 to 390VDC (Reduce to half load at 120VDC Input)
Efficiency	All Models	<u>&gt;</u> 86%
Input Frequency		47-63 Hz
Input Current	Full Load at High line	1.5Arms , max
Inrush Current	High Line , cold start	60A, max

OUTPUT SPECIFICATION		
Output Power		100W max
Leakage Current	Typical Values	170 to 220uA
Hold-Up Time	115V/230V	6ms./15ms
Voltage Set Point Accu- racy	V1	<u>+</u> 2%
Line Regulation	Low line to high line	0.3%
Load Regulation	Min to Max load	0.5%
Transient Response	50% to full load Voltage Deviation Recovery Time	10%, max <5 ms
OVP	Self Protecting	Auto Recovery
Overload Protection	Primary limited	110% to 130%
Short Circuit Protection	Auto recovery <6s	Short Term
Ripple and Noise	All Output Volatges	<1%
Output Rise Time	All outputs	<100ms

\* Maximum current per output channel. Do not exceed total output power rating

All Red Rocket, Inc. EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at <u>www.redrocketpower.com</u> and contact us at: <u>sales@redrocketpower.com</u> or by calling +1 805-409-0909 today. © 2008, Red Rocket, Inc. EOS brand power supplies and patents are owned exclusively by Red Rocket, Inc. All Rights Reserved. **REV 04-09-08** 

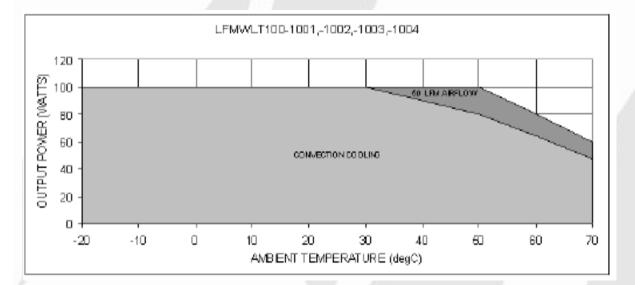


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EMC AND SAFETY SPECIFICA- TIONS		
CE Mark	Complies with the LVD	
EMC	EN5022-B,CISPR22-B, FCC Part 15 Class B, EN50082-1	
Agency Approval	VDE , UL, c-UL	
Safety Standard	EN60601-1-2	
Safety file number	UL: EI73812	
Isolation	4KVAC Input to Output 1500VAC Input to GND	
Insulation Resistance	7mOhms Input to Output	

ENVI	ENVIRONMENTAL SPECIFICATION			
Operating Temperature	Convection 50LFM Airflow Refer to de-rating	-20 to 30° C -20 to 50° C To 70° C		
Storage Tem- perature		-40 to 85° CC		
Cooling		Convection 50LFM Airflow		
Relative hu- midity	Non condensing	95%, max		
MTBF	MIL - HDBK-217F	> 200,000 hrs		
Altitude		Operating: 10,000ft Non-Operating: 40,000ft		
Vibration	Operating & Non Operating	5-9Hz, 2G PK, 0.5 oct./min, 2 cycles; 9-500Hz 0.5 oct./min, 2 cycles.		
Transients		EN61000-4-2, 4-3, 4-4, 4-5, 4 -6, 4-11 Level 3		



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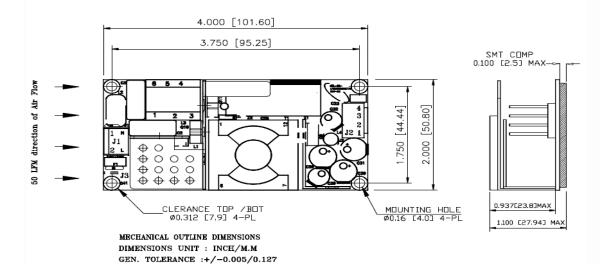
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MECHANICAL SPECIFICATION			OUTPUT C	ONNECTOR J2
AC Input Connector J1	Molex 3 position, 0.156 center Mating Connector: Molex 09-50-3031			Single Output
	Pins: 08-50-0106		Pin1	RTN
Ground Connector	Molex 19705-4301 PCB Quick Disconnect Mating: Molex AA-1140		Pin2	RTN
DC Output connector J2	Molex 4 position, 0.156 center		Pin3	V1
	Mating Connector: Molex 09-50-8041 Pins: 08-52-0072		Pin4	V1
Size	4"x2"x1.07"		1	
Weight	5oz (150g)	ľ		

INPUT CONNECTOR J1	
Pin 1	AC Neutral
Pin2	AC Line

INPUT SPADE	CONNECTOR
GND	AC Ground
1997	



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