

# MVLT80 Series

## Medical 80 Watt AC/DC Power Supplies

A medical industry favorite at 80-watts with no fan! Power solutions for 1U height and smaller applications are made easy with the single and quad output versions of the venerable 5.0"x3.04"x1.07"

EOS MVLT80 from Red Rocket, Inc. All popular DC voltages are offered from 3.3v to 48v with full universal 90v to 264v input and power conversion ratings > 85%. EN61000-3-2 Class A harmonic current correction is featured as is a full 80 watts power with convection cooling.

Ideal for all medical applications requiring a low profile and high efficiency power solution. Optional cover kit available. The MVLT80 family is RoHs compliant and our factory is ISO 14001 environmentally approved. Worldwide medical safety standards apply and the power supply is fitted with OVP and OCP standard features. Applications include:

- Endoscopy equipment
- Defibrillators
- Pumps
- IV and drips
- Laboratory gear
- Fluid analyzers
- Respiratory systems
- Diagnostic systems
- Medical lights and cameras
- Video systems



### Features :

- > 80W Universal input medical AC /DC
- > Low leakage current <250µA
- > EN55022-B, CISPR22-B FCC Part 15 Level B
- > Small 5.0 x 3.04 x 1.07" package
- > Ultra high efficiency >85%
- > NEMKO, VDE,UL and CSA approvals to IEC60601
- > Cover Kit accessory available.

Model Number	Output	Nom Vout	Set Point	Output Current	Min Load
MVLT80-1000	V1	5V	5.1V	12.0A	1.0A
MVLT80-1001	V1	12V	12v	6.8A	0.2A
MVLT80-1002	V1	15V	15V	5.5A	0.2A
MVLT80-1003	V1	24V	24V	3.4A	0.1A
MVLT80-1004	V1	48V	48V	1.7A	0.1A
MVLT80-4000	V1	5V	5.1V	10.0A	3.0A
	V2	12V	12.25V	3.0A	0.1A
	V3	-5V	-5.1V	0.8A	0.0A
	V4	-12V	-12.5V	0.8A	0.0A
MVLT80-4001	V1	5V	5.1V	10.0A	3.0A
	V2	24V	24.0V	2.0A	0.1A
	V3	12V	12.5V	0.8A	0.0A
	V4	-12V	-12.5V	0.8A	0.0A
MVLT80-4002	V1	5V	5.1V	10.0A	3.0A
	V2	15V	15.9V	3.0A	0.1A
	V3	-5V	-5.1V	0.8A	0.0A
	V4	-15V	-15.9V	0.8A	0.0A
MVLT80-4003	V1	5V	5.1V	10.0A	3.0A
	V2	12V	12.25V	3.0A	0.1A
	V3	24V	23.6V	0.8A	0.0A
	V4	-12V	-12.5V	0.8A	0.0A
MVLT80-4004	V1	3.3V	3.3V	10.0A	3.0A
	V2	5V	5.1V	3.0A	0.1A
	V3	12V	12.5V	0.8A	0.0A
	V4	-12V	-12.5V	0.8A	0.0A

1. Maximum current per output channel. Do not exceed total output power rating
2. Power fail and power good signal on quad output models & optional.

### INPUT SPECIFICATION

Input	Universal	90 to 264Vac
Efficiency	All Models MVLT80-4004	85%Typical 80%
Input Frequency		47-63 Hz
Input Current	Full Load at low line	2.2Arms, max
Inrush Current	High Line , cold start	35A, max
Leakage Current		<250 µA

### OUTPUT SPECIFICATIONS

Output Power	Convection cooled	80W max
Hold-Up Time	115V	10ms
Voltage Set Point Accuracy	V1 V2, V3,V4	±3% ±5%
Line Regulation	Low line to high line	±0.3%
Load Regulation	Min to 50% & 50% to Max load V1 V2,V3,V4	±1% ±5%
Transient Response	50% to full load Voltage Deviation Recovery Time	10%, max <1ms
OVP	V1 only 5V 3.3V	6 - 6.8V 3.9 - 4.3V
Overload Protection	Primary Limited	88-128W
Short Circuit Protection	Short Term	Auto Recovery <6s
Ripple and Noise <sup>1</sup>	3.3V & 5V Other voltages	50mV 1%
Power Fail Signal <sup>2</sup>		2ms warning
Power Good Signal	Delay after V1 high	100ms, min
Output Rise Time		< 40ms

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 [www.redrocketpower.com](http://www.redrocketpower.com) and contact us at: [sales@redrocketpower.com](mailto:sales@redrocketpower.com) 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.

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MECHANICAL SPECIFICATIONS	
AC Input Connector J1	Molex 3 position, 0.156 center Header 26-60-4030 or equivalent
Ground Connector	Spade connector 0.25"
DC Output Connector J2	Molex 12 position, 0.156 center header 26-60-4120 or equivalent
Output Connector J3	Molex 2 position, 0.100 center header 22-23-2021 or equivalent
Size	5.0 x 3.04 x 1.07" (127 x 77.22 x 27.18 mm)
Weight	9oz (250 g)

INPUT CONNECTOR J1	
Pin 1	Ac Neutral
Pin 2	Ac Line

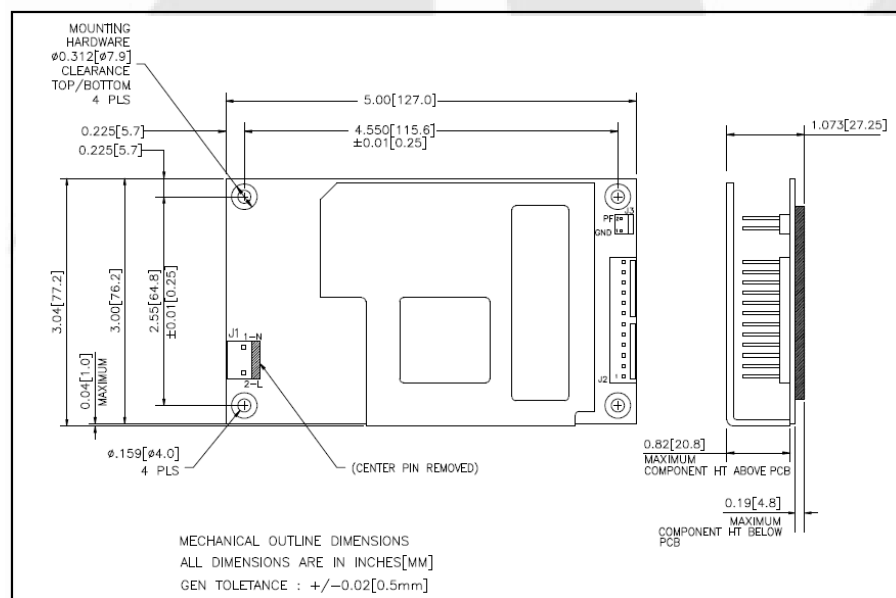
INPUT SPADE CONNECTOR	
GND	AC Ground

OUTPUT CONNECTOR J3	
Single Output	
Pin 1	Common
Pin 2	Power Fail / Good

OUTPUT CONNECTOR J2		
	Single Output	Quad Output
Pin 1,2,3,4	V1	V1
Pin 5,6,7,8	DC Return	DC Return
Pin 9,10	NC	V2
Pin 11	NC	V3
Pin 12	NC	V4

EMC AND SAFETY SPECIFICATIONS	
CE Mark	Complies with the LVD
EMC	EN5022-B, CISPR22-B, FCC Part 15 Class B, EN50082-1 EN60601-1-2ND ED
Agency Approval	NEMKO, UL, c-UL
Safety Standards	IEC60601-1, EN60601-1-1, UL60601-1, CSA C22.2 No 601 Class 1 SELV.
Safety file numbers	NEMKO:P069506 UL: E173812

ENVIRONMENTAL SPECIFICATION		
Operating Temperature	No derating Linear derate 50%	0 to 50° C 51 to 70° C
Storage Temperature		-40 to 70° C
Cooling	Convection	80W
Relative humidity	Non condensing	95%, max
MTBF	MIL-HDBK-217F	> 200,000 hrs



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 [www.redrocketpower.com](http://www.redrocketpower.com) and contact us at: [sales@redrocketpower.com](mailto:sales@redrocketpower.com) 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.