

# MVLT200 Series

## Medical 200 Watt AC/DC Power Supplies

Medical designer's 200 watt power supply of choice. The EOS brand MVLT200 medical power supply family features single-output DC configurations from 5v to 48v and efficiencies greater than 85%. Fitted in a 6.3"x3.0"x1.3" package the MVLT200 has over 8 watts per cubic inch power, 90-264v universal input, power good and fail signals, remote sense and remote on/off features.

MVLT200 family has low conducted and radiated noise and meets EN61000-3-2 class A&D harmonics. The MVLT200 family is RoHS compliant and our factory is ISO 14001 environmentally approved. Worldwide safety standards apply and the power supply is fitted with OTP, OVP and OCP standard features and an operating range from 0 to 50 degrees C. Applications include:

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



### Features :

- > **6.3 x3.0 x 1.3" Medical Power Supply**
- > **200W fan cooled rating**
- > **Patented resonant topology**
- > **Ultra high efficiency >85%**
- > **Low conducted and radiated noise**
- > **EN61000-3-2 class D Harmonics**

Model Number	Output	Nom Vout	Set Point	Current No Fan	Current 300 LFM	Min Load
MVLT200-1001	V1 Vsb	12V 5V	12V 5V	9.2A 0.5A	16.6A 0.5A	0A 0A
MVLT200-1002	V1 Vsb	15V 5V	15V 5V	7.3A 0.5A	13.3A 0.5A	0A 0A
MVLT200-1003	V1 Vsb	24V 5V	24V 5V	4.5A 0.5A	8.3A 0.5A	0A 0A
MVLT200-1004	V1 Vsb	48V 5V	48V 5V	2.3A 0.5A	4.16A 0.5A	0A 0A

### INPUT SPECIFICATION

AC Input	Auto-ranging	90 to 264V
Efficiency		85%
Input Frequency		47-63 Hz
Input Current	Full Load at low line	3.0Arms, max
Inrush Current	High Line , cold start	100A, max
Leakage Current		<250 $\mu$ A

1. Ripple and noise measured with 0.1uF C-cap and 10uF tantalum cap at measurement point
2. Power failure signals give a 1ms warning before output drops.
3. Remote sense requires 300LFM airflow.
4. Remote On/Off TTL high or open switches power supply off. TTL low/GND will turn on the power supply. Remote On/Off does not effect the Vsb stand by voltage.

### OUTPUT SPECIFICATIONS

Output Power	Convection / Fan	110W / 200W
Hold-Up Time	115V	10ms / 15ms
Voltage Set Point Accuracy	V1	$\pm$ 1%
Line Regulation	Low line to high line	$\pm$ 1.0%
Load Capacitance	Max permissible	3000 uF
Load Regulation Min to 50% & 50% to Max load	V1	$\pm$ 1.0%
Transient Response 50% to full load	Voltage Deviation Recovery Time	7%, max 5ms
Ripple and Noise <sup>1</sup>		1%
Output Overshoot	Turn on	<5%
Output Rise Time		<20ms
OVP		Redundant feed back type
Overload Protection	Primary Hiccup	210 to 260 W
Short Circuit Protection	Auto Recovery <6s	Short term
Power Fail Signal <sup>2</sup>	TTL active low	1ms warning
Power Good Signal	Delay after V1 high	0.1s to 1s
Remote Sense <sup>3</sup>	Line Compensation	500mV
Remote On/ Off <sup>4</sup>	TTL Open Collector	Yes

All 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.eospower.com](http://www.eospower.com). EOS brand power supplies and patents are owned exclusively by EOS Power. All Rights Reserved.



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MECHANICAL SPECIFICATIONS	
AC Input Connector J2	Molex 3 position, 0.156 center Header 26-60-4030 or Equivalent
J1 Mating Connector	Molex 09-50-3031 or Equivalent
Ground Connector	Spade connector, 0.25"
Output Connector J5	Tyco terminal block 282841-6 or Equivalent
J2 Wire Torque	5in /lb
Output Connector J1	Molex 22-23-2081 or Equivalent
J3 Mating Connector	Molex 10-11-2083 or Equivalent
Size (L x W x H)	6.3 x 3.0 x 1.3" (160 x 76.2 x 33 mm)
Weight	15oz (450g)

ENVIRONMENTAL SPECIFICATION		
Operating Temperature	No derating	0 to 50° C
Storage Temperature		-40 to 85° C
Cooling	Convection / 300LFM	110W / 200W
Relative humidity	Non condensing	95%, max
MTBF	Bellcore-TR332	> 100,000 hrs

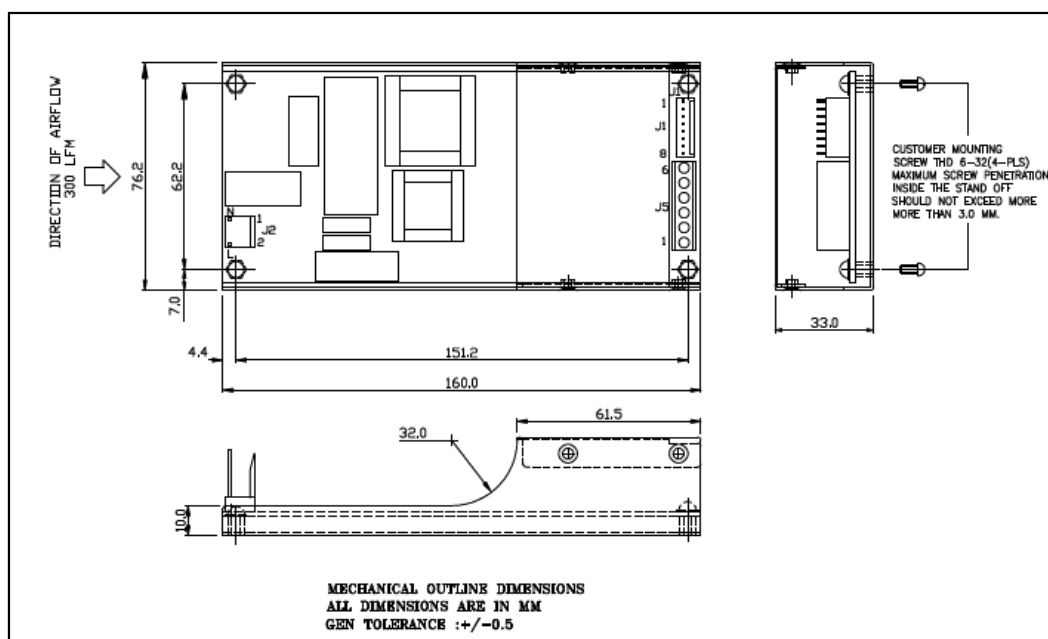
INPUT SPADE CONNECTOR	
GND	AC Ground

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
Harmonic Correction	EN1000-3-2 Class D
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: P0620674 UL: E173812

OUTPUT CONNECTOR J5	
Single Output	
Pin 1	Vsb
Pin 2	+V1
Pin 3	DC Return
Pin 4	DC Return
Pin 5	+V1
Pin 6	DC Return

INPUT CONNECTOR J2	
Pin 1	Neutral
Pin 2	Line

OUTPUT CONNECTOR J1	
Single Output	
Pin 1	No Connection
Pin 2	No Connection
Pin 3	Power Fail
Pin 4	Common
Pin 5	-V1 Sense
Pin 6	+V1 Sense
Pin 7	No Connection
Pin 8	Remote On/Off



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