

# MVLT60 Series

## Medical 60 Watt AC/DC Power Supplies

The medical industry's most demanded 60-watt convection cooled multi-output AC/DC power supply. The EOS MVLT60 medical family of power supplies is just 4.0"x2.04"x1.07" in size and the industry leader in density and power conversion efficiency.

Packing nearly 8 watts per cubic inch the MVLT60 features single and multiple outputs, superb efficiency converting AC/DC at >80% and a full 60 watts output power with convection cooling. The EOS brand MVLT60 family is the power supply of choice for discerning engineers across the medical industry and for applications ranging from defibrillators to endoscopes to fluid analyzers and respiratory systems. An optional cover kit is available. The MVLT60 is ideal for 1U (1.75") height and smaller applications where space is a premium and excellent thermal management is key. The MVLT60 family is RoHs compliant and our factory is ISO 14001 environmentally approved. World-wide medical safety standards apply and each power supply is fitted with OVP and OCP standard features.



### Features :

- > Low leakage current <250  $\mu$ A
- > EN55022-B, CISPR22-B FCC Part 15 Level B
- > Small 4.0x2.04x1.07 inch package
- > Ultra high efficiency >80%
- > NEMKO, UL, and CSA approvals to IEC60601-1
- > 60W from 1 to 3 outputs
- > Cover Kit accessory available.

Model Number	Output	Voltage / Current *	Voltage Set Point	Min. Load
MVLT60-1200	V1	5V@10.0A	5. 1V	0. 2A
MVLT60-1201	V1	12V@5.0A	12V	0. 1A
MVLT60-1202	V1	15V@4.0A	15V	0.1A
MVLT60-1203	V1	24V@2.5A	24V	0. 05A
MVLT60-1204	V1	48V@1.25A	48V	0.05A
MVLT60-3200	V1	5V@8.0A	5. 2V	0. 5A
	V2	12V@3.0A	12. 5V	0. 1A
	V3	-12V@0.5A	-12. 8V	0. 0A
MVLT60-3201	V1	5V@8.0A	5. 2V	0. 5A
	V2	24V@1.5A	24V	0. 1A
	V3	-12V@0.5A	-12. 8V	0. 0A
MVLT60-3202	V1	5V@8.0A	5. 2V	0. 5A
	V2	15V@2.5A	14. 6V	0. 1A
	V3	-15V@0.5A	-14. 8V	0. 0A
MVLT60-3203	V1	3.3V@8.0A	3. 3V	0. 1A
	V2	5V@3.0A	5. 2V	0. 1A
	V3	-12V@0.5A	-12. 8V	0. 0A
VLT60CK	Metal cover kit accessory			

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

INPUT SPECIFICATION		
AC Input	Auto-ranging	90 to 132V 180 to 264V
Efficiency		80% Typical
Input Frequency		47-63 Hz
Input Current	Full Load at low line	1.4Arms , max
Inrush Current	High Line , cold start	75A, max
Leakage Current		<250 $\mu$ A

OUTPUT SPECIFICATIONS		
Output Power	MVLT60-1200 MVLT60-3203 Other Models	50W 45W 60W Max
Voltage Set Point		See table
Hold-Up Time	115V/230V	6ms./15ms
Voltage Set Point Accuracy	V1 V2 and V3	$\pm$ 3% $\pm$ 5%
Line Regulation	Low line to high line	$\pm$ 0.3%
Load Regulation	Min to 50% & 50% to Max load V1 V2 and V3	$\pm$ 0.5% $\pm$ 5%
Transient Response	50% to full load Voltage Deviation Recovery Time	10%, max <5 ms
OVP (For 3 o/p models only)	V1 only 3.3 V V1 only 5V	3.95V, $\pm$ 0.25V 6.2V, $\pm$ 0.4V
Overload Protection	Primary limited	Yes, 130%
Short Circuit Protection	Auto recovery <6s	Short Term
Ripple and Noise	3.3V and 5V Other voltages	50mV 1%
Output Rise Time	All outputs	<100ms

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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EMC AND SAFETY SPECIFICATIONS	
CE Mark	Complies with the LVD
EMC	EN5022-B, CISPR22-B, FCC Part 15 Class B, EN50082-1, EN60601-1-2
Agency Approval	NEMKO, UL, c-UL
Safety Standard	IEC60601-1, EN60601-1-1, UL60601-1, CSA C22.2 NO 601 Class 1 SELV
Safety file number	NEMKO: P06206742 UL: E173812

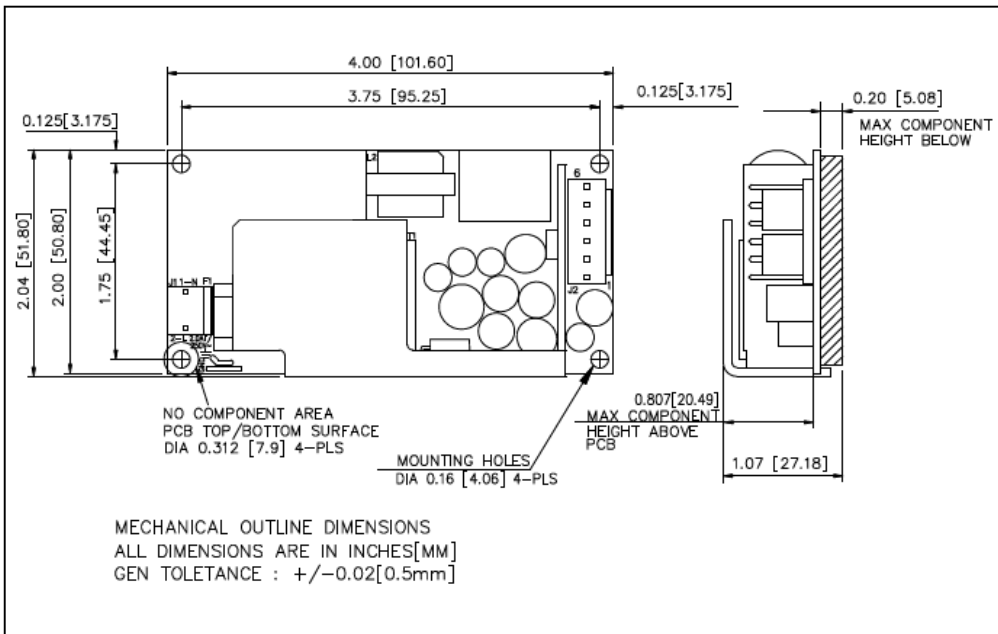
INPUT CONNECTOR J1	
Pin1	AC Neutral
Pin2	AC Line

INPUT SPADE CONNECTOR	
GND	AC Ground

OUTPUT CONNECTOR J2		
	Single Output	Triple Output
Pin1	V1	V1
Pin2	V1	V1
Pin3	Common	Common
Pin4	Common	Common
Pin5	NC	V3
Pin6	NC	V2

ENVIRONMENTAL SPECIFICATION		
Operating Temperature	No derating Linear derate to 50%	0 to 50° C 51 to 70° C
Storage Temperature		-40 to 85° CC
Cooling		Convection
Relative humidity	Non condensing	95%, max
MTBF	MIL - HDBK-217F	> 100,000 hrs

MECHANICAL SPECIFICATION	
AC Input Connector J1	Molex 3 position, 0.156 center Header 26-60-4030 or Equivalent
Ground Connector	Spade connector
DC Output connector J2	Molex 6 position, 0.156 center Header 26-60-4060 or Equivalent
Size	4.0" x 2.04"x.1.07" (101.6 x 51.82 x 27.18 mm)
Weight	5oz (150g)



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