

# MVLT40 Series

## Medical 40 Watt AC/DC Power Supplies

Low profile in a 4.0"x2.0"x1.07" package and over 82% efficient the EOS MVLT40 medical power supply family comes in single and triple DC output configurations. The low leakage current MVLT40 offers a full 40 watts output power with convection cooling and more with optional air flow. A cover kit is available for easy drop in design and manufacturability.

This industry and designer's favorite is used to power a variety of medical applications to include endoscopy systems and video, pumps/drips, test and lab gear, sleep disorder. If space is a premium and thermal management integral to your design we suggest the MVLT40 as the optimum solution. The MVLT40 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
- Pumps, IVs and drips
- Laboratory gear
- Fluid analyzers
- Respiratory systems
- Diagnostic systems



### Features :

- > Low leakage current <250  $\mu$ A
- > EN55022-B, CISPR22-B FCC Part 15 Level B
- > Small 4.0"x2.0"x1.07 inch package
- > Ultra high efficiency >82%
- > NEMKO, UL, and CSA approvals to IEC60601
- > Cover Kit accessory available.

### INPUT SPECIFICATION

AC Input	Auto-ranging	90 to 132V 180 to 264V
Efficiency Typical	MVLT40-3203 Other Models	75% 82%
Input Frequency		47-63 Hz
Input Current	Full Load at low line	1.1Arms , max
Inrush Current	High Line , cold start	75A, max
Leakage Current		<250 $\mu$ A

### OUTPUT SPECIFICATIONS

Output Power		40W 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

Model Number	Output	Voltage / Current *	Voltage Set Point	Min. Load
MVLT40-1200	V1	5V@ 8.0A	5. 1V	0. 2A
MVLT40-1201	V1	12V@ 3.5A	12V	0. 1A
MVLT40-1202	V1	15V@ 2.7A	15V	0. 1A
MVLT40-1203	V1	24V@ 1.7A	24V	0. 05A
MVLT40-1204	V1	48V@ 0.83A	48V	0.05A
MVLT40-3200	V1	5V@6.0A	5. 2V	0. 5A
	V2	12V@2.0A	12. 5V	0. 1A
	V3	-12V@0.5A	-12. 8V	0. 0A
MVLT40-3201	V1	5V@6.0A	5. 2V	0. 5A
	V2	24V@1.0A	24V	0. 1A
	V3	-12V@0.5A	-12. 8V	0. 0A
MVLT40-3202	V1	5V@6.0A	5. 2V	0. 5A
	V2	15V@1.5A	14. 6V	0. 1A
	V3	-15V@0.5A	-14. 8V	0. 0A
MVLT40-3203	V1	3.3V@6.0A	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

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 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 2.0" x 1.07" 101.6 x 50.8 x 27.18 mm
Weight	5oz (150g)

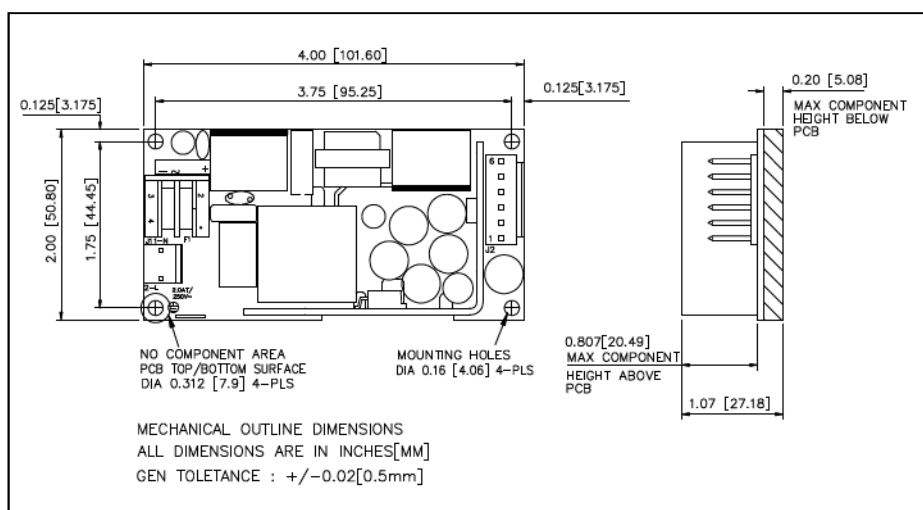
INPUT SPADE CONNECTOR	
GND	AC Ground

INPUT CONNECTOR J1	
Pin1	AC Neutral
Pin2	AC Line

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

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	VDE , 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
Isolation Voltage	4000 VAC

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



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