

# LPS60-M Series 60 Watts Medical

**Data Sheet** 

Total Power: 60 - 80 Watts Input Voltage: 85-264 VAC 120-300 VDC # of Outputs: Single

### **SPECIAL FEATURES**

- Medical safety approvals
- Universal input
- 3" x 5" footprint
- Remote sense
- Built in EMI filter
- Low output ripple
- Adjustable output voltage
- Overload protection
- 110 KHz switching frequency
- LPX60 enclosure kit available

#### SAFETY

TUV	EN 60950-1
	EN 60601-1
UL	UL 2601-1
	CSA 22.2 No. 601.1
	E182560
CB	IEC 60950-1
	IEC 60601-1

CE Mark (LVD)





Electrical Specifications		
Input		
Input range	85 - 264 VAC (wide range), 120 - 300VDC	
Frequency	47 - 440 Hz	
Inrush current	<18A peak @ 115VAC, <36A peak @230 VAC, cold start @ 25°C	
Input current	1.5A max. (RMS) @ 115 VAC	
Efficiency	70% typical at full load	
EMI filter	FCC Class A conducted; CISPR22 Class A conducted; EN55022 Class A conducted; VDE0878 PT3 Class A conducted	
Safety ground leakage current	< 75µA @ 50/60 Hz; 264 VAC input	
Output		
Maximum power	60 W for convection; 80 W with 30 CFM forced air	
Adjustment range	-5, +10% minimum	
Hold-up time	20 ms @ 60 W load, 115 VAC nominal line	
Overload protection	Short circuit protection on all outputs Case overload protected @ 110 - 145% above peak rating	
Overvoltage protection	5V output; 5.7 - 6.7 VDC. Other outputs 10% to 25% above nominal output	
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected Reverse connection protected	





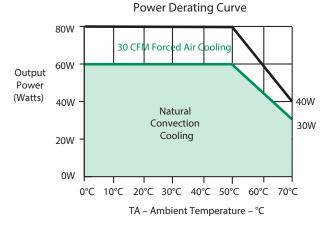
Environmental Specifications		
Operating temperature	0° to 50 °C ambient. Derate each output as 2.5% per degree from 50° to 70 °C, -20 °C startup	
Storage temperature	-40 °C to +85 °C	
Electromagnetic susceptibility	Designed to meet IEC61000-4-2, -4-3, -4-4, -4-5, -4-6, Level 3	
Humidity	Operating; non-condensing 5% to 95% RH	
Vibration	Three orthogonal axes, sweep at 1cot/min, 5 min.dwell at four major resonances 0.75G peak 5Hz to 500 Hz, operational	
Temperature coefficient	±0.04% per °C	
MTBF demonstrated	> 550,000 hours at full load and 25 °C ambient conditions	

Ordering Information							
Model Number	Output Voltaqe	Minlmun Load	MaxImun Load with Convection Cooling	Maximun Load with 30CFM Forced Air	Peak Load <sup>1</sup>	<b>Requlation</b> <sup>2</sup>	Ripple P/P(PARD) <sup>3</sup>
LPS63-M	12 V	OA	5 A	6.7 A	7.5 A	± 2%	120 mV
LPS64-M	15 V	OA	4 A	5.3 A	6 A	± 2%	150 mV
LPS65-M	24 V	0A	2.5 A	3.3 A	3.8 A	± 2%	240 mV

1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.

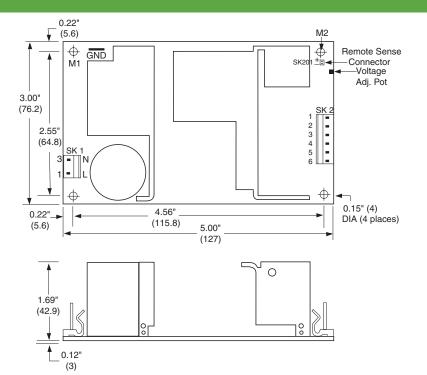
2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.

3. Peak-to-peak with 20 MHz bandwidth and 10 µF (tantalum capacitor) in parallel with a 0. µF capacitor at rated line voltage and load ranges.





#### **Mechanical Drawings**



Pin Assignments				
Connector	LPS62-M	LPS63-M	LPS64-M	
SK1-1	Line	Line	Line	
SK1-3	Neutral	Neutral	Neutral	
SK2-1	+12 V	+15 V	+24 V	
SK2-2	+12 V	+15 V	+24 V	
SK2-3	+12 V	+15 V	+24 V	
SK2-4	Common	Common	Common	
SK2-5	Common	Common	Common	
SK2-6	Common	Common	Common	
SK201-1	+Sense	+Sense	+Sense	
SK201-2	-Sense	-Sense	-Sense	

Mating Connectors		
AC Input:	Molex 09-50-8031 (USA) Not required for (-T) option 09-91-0300 (UK) PINS: 08-58-0111	
DC Outputs:	Molex 09-50-8061 (USA) Not required for (-T) option 09-91-0600 (UK) PINS: 08-52-0113	
Remote Sense:	Molex 22-01-2025 PINS: 08-52-0113	
Astec Connector Kit #70-841-006, includes all of the above		

1. Specifications subject to change without notice.

- 2. All dimensions in inches (mm), tolerance is  $\pm 0.02$ " ( $\pm 0.5$  mm)
- 3. Mounting holes M1 and M2 should be grounded for EMI purposes.
- 4. Mounting hole M1 is safety ground connection.
- 5. Specifications are for convection rating at factory settings at 115 VAC input, 25 °C unless otherwise stated.
- 6. Warranty: 2 years
- 7. Weight: 0.75 lbs/0.34 kg

#### **WORLDWIDE OFFICES**

#### Americas 2900 S.Diablo Way Tempe, AZ 85282

USA +1 888 412 7832

## Europe (UK)

Waterfront Business Park Merry Hill, Dudley West Midlands, DY5 1LX United Kingdom +44 (0) 1384 842 211

#### Asia (HK)

14/F, Lu Plaza 2 Wing Yip Street Kwun Tong, Kowloon Hong Kong +852 2176 3333



www.artesyn.com

For more information: www.artesyn.com/power For support: productsupport.ep@artesyn.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Artesyn Embedded Technologies assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions. Artesyn Embedded Technologies, Artesyn and the Artesyn Embedded Technologies logo are trademarks and service marks of Artesyn Embedded Technologies, Inc. All other names and logos referred to are trade names, trademarks, or registered trademarks of their respective owners. © 2015 Artesyn Embedded Technologies, Inc.

LPS60-M Series-DS 17Mar2015

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Switching Power Supplies category:

Click to view products by Artesyn Embedded Technologies manufacturer:

Other Similar products are found below :

 70841011
 73-551-0005
 73-551-0048
 PS3E-B12F
 PS3E-E12F
 AAD600S-4-OP
 R22095
 KD0204
 9021
 LDIN100150
 LPM000-BBAR-01

 LPX17S-C
 EVS57-10R6/R
 FP80
 FRV7000G
 22929
 PS3E-F12F
 CQM1IA121
 40370121900
 VI-PU22-EXX
 40370121910
 LDIN5075

 LPM615-CHAS
 LPX140-C
 09-160CFG
 70841025
 VPX3000-CBL-DC
 VI-LUL-IU
 LPM000-BBAR-05
 LPM000-BBAR-08
 LPM124 

 OUTA1-48
 LPM000-BBAR-07
 LPM109-OUTA1-10
 LPM616-CHAS
 08-30466-1055G
 08-30466-2175G
 08-30466-2125G
 DMB-EWG

 TVQF-1219-18S
 6504-226-2101
 CQM1IPS01
 SP-300-5
 CQM1-IPS02
 VI-MUL-ES
 22829
 08-30466-0065G
 VI-RU031-EWWX
 08-30466 

 0028G
 EP3000AC48INZ
 VP-C2104853
 VP-C2104853
 VP-C2104853
 VP-C2104853