

# **LPS50-M Series**

60 Watts

#### **Data Sheet**

**Total Power:** 55 - 60 Watts **Input Voltage:** 90 - 264 Vac 127 - 300 Vdc

# of Outputs: Single

### **SPECIAL FEATURES**

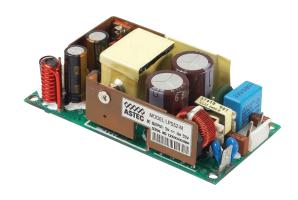
- Medical safety approvals
- Universal input
- 2" x 4" footprint
- Less than 1U high
- Remote sense
- Overload and short circuit protection
- Adjustable output voltage
- High efficiency
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- LED power good indicator
- Input power < 74 watts</p>
- Complies with EN61000-3-2
- RoHS compliant
- UL Class I approved
- LPX100 enclosure kit available
- Dual AC fuses

## **SAFETY**

■ UL UL 60601-1

CSA
 CSA-C22.2 No. 601.1-M90

VDE EN60601-1CE LVD & EMC



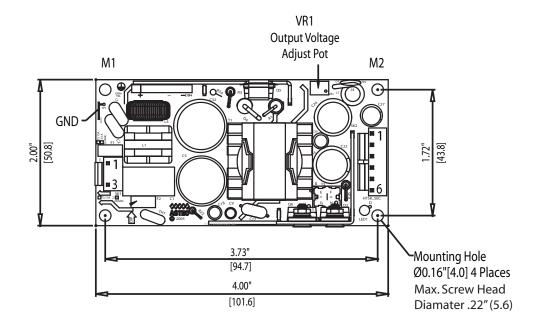
Electrical Specifications			
Input			
Input range	90 - 264 Vac (wide range) 127 - 300 Vdc <sup>1</sup>		
Frequency	47 - 63 / 440 Hz (Safety rating 50/60 Hz)		
Inrush current	<60 A peak @ 230 Vac, cold start @ 25 °C		
Input power	<74 Watts		
Efficiency	80 - 85% typical at full load		
EMI/RFI	FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B conducted; VDE0878PT3 Class B conducted.		
Safety ground leakage current	275 μA @ 50/60 Hz; 264 Vac input		
Output			
Maximum power	60 W for convection (LPS52 is 55 W)		
Adjustment range	±20% minimum		
Hold-up time	10/20 ms 115/230 Vac input line		
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-160% of normal rating		
Overvoltage protection	30% to 50% above nominal output		
Remote sense	Compensates for 0.5 V lead drop max. Will operate without remote sense connected. Reverse connection protected.		

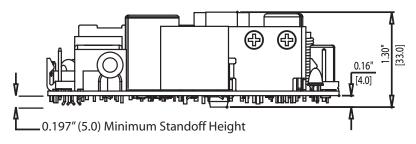
<sup>&</sup>lt;sup>1</sup>DC input rating is not part of the product's Safety approval.



Environmental Specifications		
Operating temperature	0° to 50 °C ambient derate each output 2.5% per degree from 50° to 70 °C20 °C start up.	
Storage temperature	-40 °C to +85 °C	
Electromagnetic susceptibility	Designed to meet IEC61000-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11 Level 3	
Humidity	Operating; non-condensing 10% to 95% RH	
Vibration	IEC68-2-6 to the levels of IEC721-3-2	
MTBF demonstrated	>550,000 hours at full load and 25 °C ambient conditions	

## Mechanical Drawings





Ordering Information							
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPS52-M	5 V	0 A	11 A	12 A	13 A	±2%	50 mV
LPS53-M	12 V	0 A	5 A	5.4 A	5.5 A	±2%	120 mV
LPS54-M	15 V	0 A	4 A	4.4 A	4.4 A	±2%	150 mV
LPS55-M	24 V	0 A	2.5 A	2.75 A	2.75 A	±2%	240 mV

- 1. Peak current lasting <15 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.

11 11

- 3. Peak-to-peak with 20 MHz bandwidth and 10 µF (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
- 4. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

Pin Assignments					
Connector	LPS52-M	LPS53-M	LPS54-M	LPS55-M	LPS58-M
SK1-1	Line	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral	Neutral
SK2-1	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-2	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-3	Common	Common	Common	Common	Common
SK2-4	Common	Common	Common	Common	Common
SK2-5	-Sense	-Sense	-Sense	-Sense	-Sense
SK2-6	+Sense	+Sense	+Sense	+Sense	+Sense

Mating Connectors		
AC Input	Molex 09-50-8031 (USA) 09-93-0300 (UK) PINS: 08-52-0113	
DC Outputs	Molex 09-50-8061 (USA) 09-93-0600 (UK) 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 ±0.02"(± 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: 0.41lbs/0.18kg

## **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

## **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 AAD600S-4-OP R22095 HWS50A-5/RA KD0204 9021 S-15F-12 LDIN100150 LPM000-BBAR-01 LPX17S-C EVS57-10R6/R FDC40-24S12 FRV7000G 22929 CQM1IA121 40370121900 VI-PU22-EXX 40370121910 LDIN5075 432703037161 WRB01X-U LPX140-C 08-30466-1040G 09-160CFG 70841004 70841025 VPX3000-CBL-DC LPM000-BBAR-05 LPM000-BBAR-08 LPM124-OUTA1-48 LPM000-BBAR-07 LPM109-OUTA1-10 LPM616-CHAS 08-30466-1055G 08-30466-2175G DMB-EWG TVQF-1219-18S 6504-226-2101 CQM1IPS01 XPFM201A+ MAP80-4000G LFP300F-24-TY SMP21-L20-DC24V-5A VI-MUL-ES 08-30466-0065G CME240P-24 VI-RU031-EWWX 08-30466-0028G S82Y-TS01