

## LPS100-M Series

150 Watts

**Total Power:** 80 - 150 Watts  
**Input Voltage:** 90 - 264 Vac  
**# of Outputs:** Single



### Special Features

- Medical and ITE safeties
- Active power factor correction
- 2" x 4" footprint
- Less than 1U high
- EN61000-3-2 compliant
- Remote sense
- Power fail
- Adjustable main output
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection
- Isolated 12 V Fan output
- LPX50 Enclosure kit available
- POE isolation on main output of LPS109-M

### Electrical Specifications

Input	
Input range:	90 - 264 Vac; 120 - 300 Vdc
Frequency:	47-63 Hz
Inrush current:	50 A max., cold start @ 25 °C
Efficiency:	88% 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:	100 W for convection (80 W for LPS102-M); 150 W with 30 CFM forced air (120 W for LPS102-M)
Adjustment range:	± 10% minimum on the main outputs
Fan output:	12 V @ 1 A isolated, ± 10%
Hold-up time:	10 ms @ 150 W load, 120 Vac input
Overload protection:	Short circuit protection on all outputs. Case overload protected @ 110-160% above rating
Overvoltage protection:	15-35% above nominal output
Logical Control	
Power failure:	Open collector logic signal goes high 100-500 msec after main output; it goes low at least 6 msec before loss of regulation
Remote sense:	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

### Safety

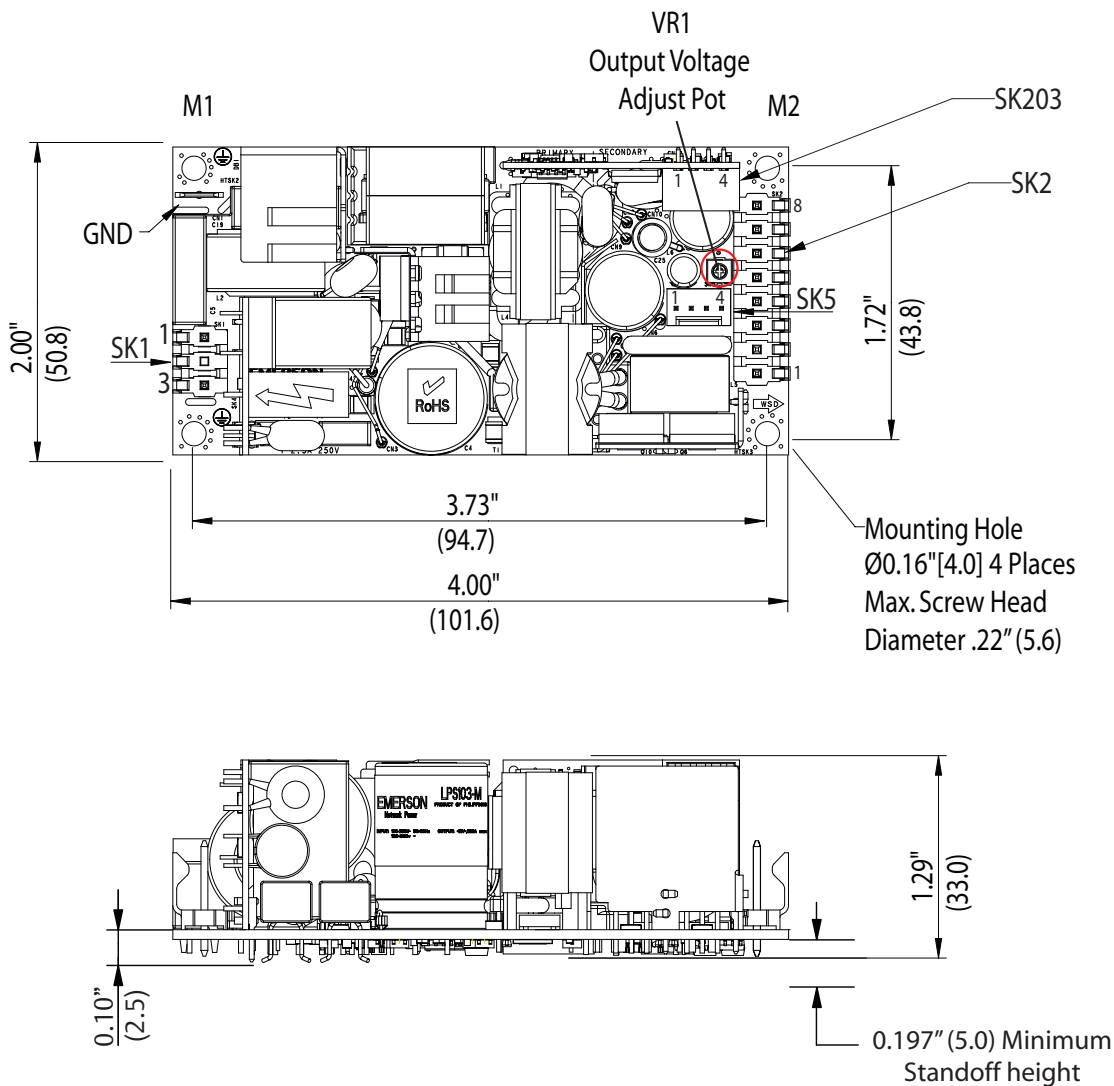
- TUV 60950, 60601-1
- UL 60950, 60601-1
- cULus 60950, 60601-1
- CB Certificate & report
- CE Mark (LVD)
- CQC Mark

## Environmental Specifications

Rev. 11.02.11\_29  
LPS100-M Series  
2 of 3

Operating temperature:	0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C. -20 °C start up
Storage temperature:	-40 °C to +85 °C
Electromagnetic susceptibility:	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 10% to 95% RH
Vibration:	IEC68-2-6 to the levels of IEC721-3-2
MTBF calculated:	534,000 hours at full load and 25 °C ambient conditions, 230 V input, Bellcore

## Mechanical Drawing



## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPS102-M	5 V	0 A	16 A	24 A	30 A	± 2%	50 mV
LPS103-M	12 V	0 A	8.3 A	12.5 A	14 A	± 2%	120 mV
LPS104-M	15 V	0 A	6.7 A	10 A	11 A	± 2%	150 mV
LPS105-M	24 V	0 A	4.2 A	6.3 A	7 A	± 2%	240 mV
LPS108-M	48 V	0 A	2.1 A	3.1 A	3.5 A	± 2%	480 mV
LPS109-M	54 V	0 A	1.85 A	2.8 A	3.1 A	± 2%	540 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 0.1 µF capacitor at rated line voltage and load ranges.

## Pin Assignments

Connector	LPS100-M	
SK1	Pin 1	Neutral
	Pin 3	Line
	Pin 2	Common
SK2	Pin 1	Common
	Pin 2	Common
	Pin 3	Common
	Pin 4	Common
	Pin 5	+Vout
	Pin 6	+Vout
	Pin 7	+Vout
SK203	Pin 8	+Vout
	Pin 1	Common
	Pin 2	Power Fail
	Pin 3	- Remote Sense
	Pin 4	+ Remote Sense
SK5	Pin 1	+12 V Fan
	Pin 2	+12 V Fan
	Pin 3	Fan Return (Isolated)
	Pin 4	Fan Return (Isolated)

### Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. mounting holes MH1, MH2 should be grounded for EMI purpose
4. Mounting MH1 is safety ground connection
5. Specifications are for convection rating at factory settings at 115 Vac input 25 °C unless otherwise stated.
6. This power supply requires mounting on metal standoffs 0.20" (5 m) in height.
7. For DC input an external DC safety rated fuse must be used.
8. Warranty: 2 year
9. Weight: 0.44 lb. / 0.20 kg

## Mating Connectors

AC Input (SK1):	Molex P/N: 09-50-3031, Pins: 08-52-0072 or Landwin P/N: 3060S0302, Pins: 3360T011P
AC Ground	Molex: 01-90020001
DC Output (SK2):	Molex P/N: 09-50-3081, Pins: 08-52-0072 or Landwin P/N: 3060S0802, Pins: 3360T011P
Remote Sense (SK203):	Molex P/N: 35155-0400, Pins: 08-70-0057 or Landwin P/N: 2640S04A0, Pins: 2543T011P
Fan: (SK5):	Molex P/N: 22-01-1042, Pins: 08-70-0049 or Landwin: P/N: 2510S04A0, Pins: 2543T011P
Emerson Network Power Connector Kit #70-841-025, includes all of the above	

## Americas

5810 Van Allen Way  
Carlsbad, CA 92008  
USA  
Telephone: +1 760 930 4600  
Facsimile: +1 760 930 0698

## Europe (UK)

Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX  
United Kingdom  
Telephone: +44 (0) 1384 842 211  
Facsimile: +44 (0) 1384 843 355

## Asia (HK)

14/F, Lu Plaza  
2 Wing Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
Telephone: +852 2176 3333  
Facsimile: +852 2176 3888

For global contact, visit:

[www.Emerson.com/EmbeddedPower](http://www.Emerson.com/EmbeddedPower)  
[techsupport.embeddedpower@emerson.com](mailto:techsupport.embeddedpower@emerson.com)

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

## Emerson Network Power.

The global leader in enabling business-critical continuity.

- AC Power
- Connectivity
- DC Power
- Embedded Computing
- Embedded Power
- Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

## EmersonNetworkPower.com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2011 Emerson Electric Co.

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9