LPS40-M Series

40 Watts

Medical

Total Power:	**40-55 Watts**
Input Voltage:	**85-264 VAC**
	120-300 VDC
# of Outputs:	**Triple**

RoHS 2002/95/EC

Special Features

- Medical safety approvals
- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense on main output
- Low output ripple
- Adjustable 5V output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available

Safety

VDE	0750/EN60601-1 (IEC601)
UL	UL2601 E182560
CSA	CSA 22.2 No.601.1
	LR109492
CE Mark	(LVD)

Electrical Specifications

Input	
Input range	85-264 VAC; 120-300 VDC
Frequency	47-440 Hz
Inrush current	<18A peak @ 115VAC; <36A peak @ 230VAC, cold start @ 25°C
Input current	1A max. (RMS) @ 115VAC
Efficiency	70% typical at full load
EMI filter	FCC Class B conducted; CISPR 22 Class A conducted; EN55022 Class A conducted; VDE 0878 PT3 Class A conducted
Safety ground leakage current	<75µA @ 50/60 Hz, 264 VAC input
Output	
Maximum power	40W for convection; 55W with 30CFM forced air
Adjustment range	-5, +10% minimum
Hold-up time	20ms @ 40W load, 115VAC nominal line
Overload protection	Short circuit protection on all outputs Case overload protected @ 110-145% above peak rating
Overvoltage protection	5V output; 5.7 to 6.7VDC. Other outputs 10% to 25% above nominal output
Remote sense	Compensates for 0.5 V lead drop minimum. Will operate without remote sense connected. Reverse connection protected.

ASTEC

EMERSON
Network Power

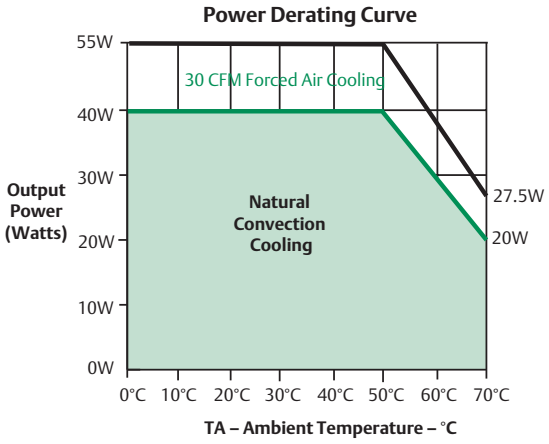
Environmental Specifications

Operating temperature:	0° to 50°C ambient. Derate each output 2.5% per degree from 50° to 70°C, -20°C startup
Storage temperature:	-40°C to +85°C
Temperature coefficient:	±0.4% per °C
Electromagnetic susceptibility:	Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3
Humidity:	Operating; non-condensing 5% to 95% RH
Vibration:	Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75G peak 5Hz to 500Hz, operational
MTBF demonstrated:	>550,000 hours at full load and 25°C ambient conditions

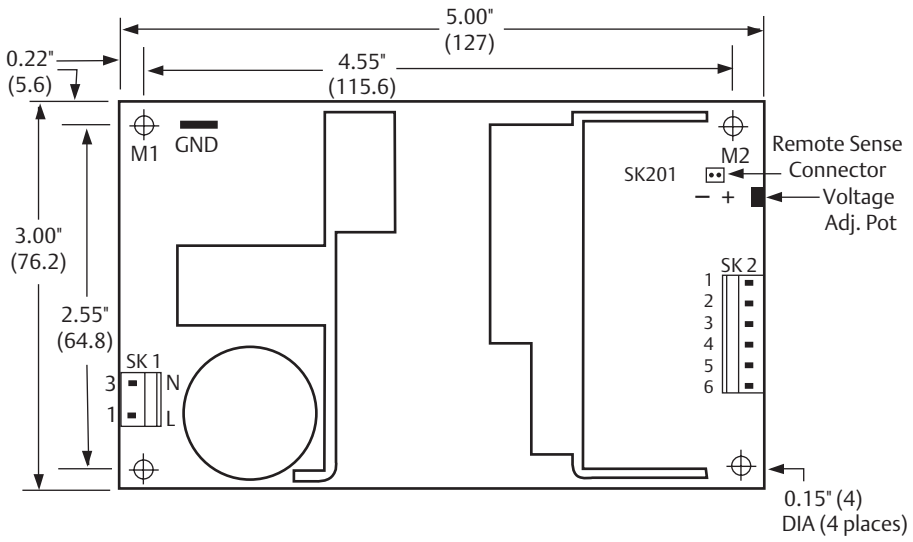
Ordering Information

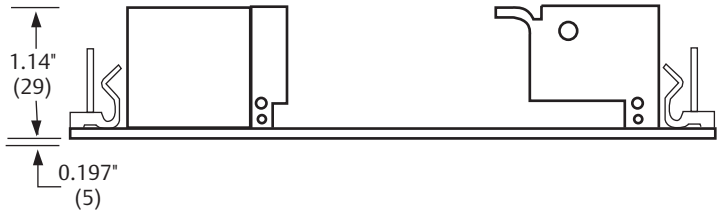
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM forced Air	Peak Load [1]	Regulation [2]	Ripple P/P (PARD)[3]
LPS42-M	5V	0A	8A	11A	12A	±2%	50 mV
LPS43-M	12V	0A	3.3A	4.5A	5A	±2%	120 mV
LPS44-M	15V	0A	2.6A	3.6A	4A	±2%	150mV
LPS45-M	24V	0A	1.6A	2.3A	2.5A	±2%	240mV

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 in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.



Mechanical Drawing





Pin Assignments

Connector	LPS42-M	LPS43-M	LPS44-M	LPS45-M
SK1-1	Neutral	Neutral	Neutral	Neutral
SK1-3	Line	Line	Line	Line
SK2-1	+5V	+12V	+15V	+24V
SK2- 2	+5V	+12V	+15V	+24V
SK2- 3	+5V	+12V	+15V	+24V
SK2-4	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common
SK201-1	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense

Mating Connectors

AC Input: Molex 09-50-8031 (USA)
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: 08-58-0111

Remote Sense: Molex 22-01-2025
PINS: 08-50-0114

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" (±0.5mm)
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 year
7. Weight: 0.5lbs/0.23kg

Astec

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

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

13-15, Shing Wan Road
Tai Wai, Shatin, N. T.
Hong Kong
Telephone: +852 2699 2868
Facsimile: +852 2699 1770

For global contact, visit:
www.astecpower.com
technicalsupport@astec.com