

LPS 40 Medical

40 Watts

LPS 40 Medical Series

Total Power	40 - 55 Watts
Input Voltages	85 - 264 VAC 120 - 370 VDC
# of Outputs	Single



SPECIAL FEATURES

- Medical Safety Approvals
- Universal input
- High efficiency
- Remote sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Overvoltage protection
- Overload protection
- Enclosure kit available (see page 62)

ENVIRONMENTAL

Operating temperature: 0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: designed to meet EN61000-4, -2, -3, -4, -5, -6, Level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ±.04% per °C

MTBF demonstrated: >550,000 hours at full load and 25°C ambient conditions

ELECTRICAL SPECIFICATIONS

Input

- Input range 85-264 VAC;
120-370 VDC
- Frequency 47-440 Hz
- Inrush current <18 A peak @ 115 VAC;
<36 A peak @ 230 VAC,
cold start @ 25°C
- Input current 1 A max. (RMS) @ 115 VAC
- Efficiency 70% typical at full load
- EMI filter FCC Class A conducted
CISPR 22 Class A conducted
EN55022 class A conducted
VDE 0878 PT3 class A conducted
- Safety ground leakage current <75 µA @ 50/60 Hz, 264 VAC input

Output

- Maximum power 40 W for convection;
55 W with 30 CFM forced air
- Minimum load no minimum load required
- Adjustment range -5, +10% minimum
- Hold-up time 20 ms @ 40 W load, 115 VAC nominal line
- Overload protection Short circuit protection on all outputs.
Case overload protected @ 110-145%
above peak rating
- Overvoltage protection 5 V output: 5.7 to 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.

SAFETY

VDE	0750/EN60601-1 (IEC601)	113769
UL	UL2601	E182560
CSA	CSA 22.2 no. 601.1	LR109492
CE	Mark (LVD)	

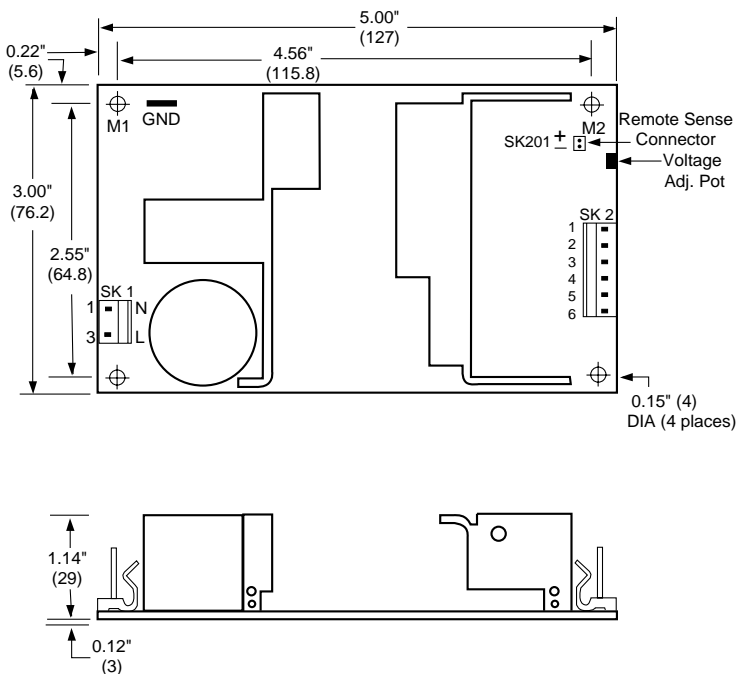


ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load ¹	Regulation ²	Ripple P/P (PAR) ³
LPS42-M	5 V	0 A	8 A	11 A	12 A	±2%	50 mV
LPS43-M	12 V	0 A	3.3 A	4.5 A	5 A	±2%	120 mV
LPS44-M	15 V	0 A	2.6 A	3.6 A	4 A	±2%	150 mV
LPS45-M	24 V	0 A	1.6 A	2.3 A	2.5 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 in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

DRAWINGS



PIN ASSIGNMENTS

Connector	LPS42	LPS43	LPS44	LPS45
SK1-1	Neutral	Neutral	Neutral	Neutral
SK1-3	Line	Line	Line	Line
SK2-1	+5 V	+12 V	+15 V	+24 V
SK2-2	+5 V	+12 V	+15 V	+24 V
SK2-3	+5 V	+12 V	+15 V	+24 V
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)
26-03-4030 (UK)
PINS: 05-58-0189
- DC Outputs: Molex 09-50-8061 (USA)
26-03-4061 (UK)
PINS: 05-58-0189
- Remote Sense: Molex 22-01-2025
PINS: 08-50-0114
- Astec Connector Kit #70-841-006

NOTES

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
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: 1 year
7. Weight: 0.5 lb. / 0.23 kg

Power Derating Curve

