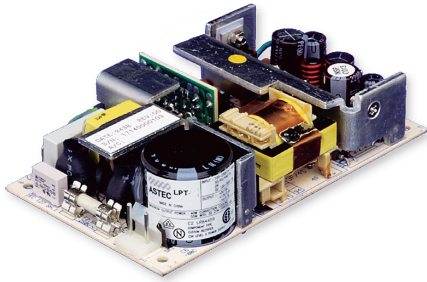


# 40 Watts LPT40 Series Medical

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



## Special Features

- Medical safety approvals
- Universal input
- 3" x 5" footprint
- Remote sense on main output
- Built-in EMI filter
- Low output ripple
- Adjustable 5 V output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available

## 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 IEC 801, -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 Specs

### Input

Input range	85-264 VAC 120-300 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
Adjustment range	-5, +10% minimum
Cross regulation	±2% on output 1; ±5% on outputs 2, 3
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	5.7 to 6.7 VDC on main output
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

## Safety

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

AMERICAS

5810 Van Allen Way  
 Carlsbad, CA 92008  
 Telephone: 760-930-4600  
 Facsimile: 760-930-0698

EUROPE

Astec House, Waterfront Business Park  
 Merry Hill, Dudley  
 West Midlands, DY5 1LX, UK  
 Telephone: 44 (1384) 842-211  
 Facsimile: 44(1384) 843-355

ASIA

Units 2111-2116, Level 21  
 Tower1, Metroplaza  
 223, Hing Fong Road  
 Fwai Fong, New Territories  
 Hong Kong  
 Telephone: 852-2437-9662  
 Facsimile: 852-2402-4426



## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPT42-M	+5 V	0.4 A	4 A	5 A	7 A	±2%	50 mV
	+12 V	0.2 A	2 A	2.5 A	4 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
LPT45-M	+5 V	0.4 A	4 A	5 A	7 A	±2%	50 mV
	+15 V	0.2 A	2 A	2.5 A	3 A	±5%	150 mV
	-15 V	0 A	0.5 A	0.7 A	1 A	±5%	150 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.
4. Minimum Loads are required.

## Pin Assignments

Connector	LPT42-M	LPT45-M
SK1-1	Neutral	Neutral
SK1-3	Line	Line
SK2-1	+12 V	+15 V
SK2-2	+5 V	+5 V
SK2-3	+5 V	+5 V
SK2-4	Common	Common
SK2-5	Common	Common
SK2-6	-12 V	-15 V
SK201-1	+Sense	+Sense
SK201-2	-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)  
 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.

### 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

