

LPT 40 Medical

40 Watts

LPT 40 Series

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



SPECIAL FEATURES

- Medical safety approvals
- Universal input
- High efficiency
- Remote sense on main output
- Built-in EMI filter
- Low output ripple
- Adjustable 5 V 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 IEC 801, -2, -3, -4, -5, -6, Level 3

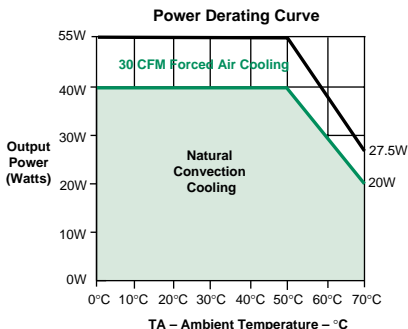
Humidity: Operating; non-condensing 5% to 95%

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 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	minimum load required, see table
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	5V output compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

SAFETY

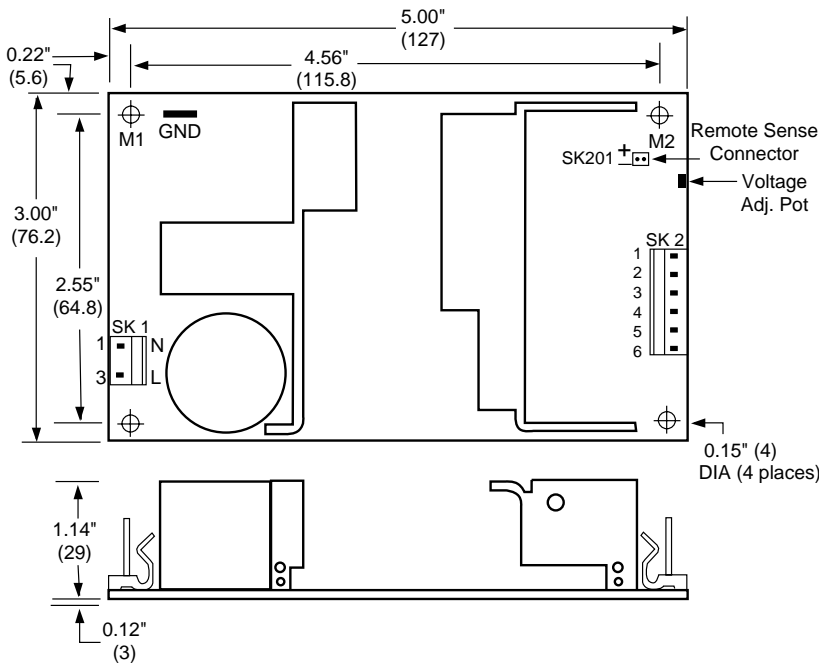
VDE	0750/EN60601-1 (IEC601)	113769
UL	UL2601	E182560
CSA	CSA 22.2 No. 601.1	LR109492
CE	Mark (LVD)	

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 (PARD) ³
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 for correct operation, unit will self protect if no load connected.

DRAWINGS



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	+5V Sense	+5V Sense
SK201-2	-5V Sense	-5V 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

REV 10.5.99

