Embedded Power for Business-Critical Continuity

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# LPT40-M Series 40 Watts

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





## Special Features

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

# Safety

- VDE 0750/EN60601-1 (IEC601) 113769
- 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 @ 115 VAC; < 36A peak @ 230 VAC, cold start @ 25 °C
Input current:	1A max. (RMS) @ 115VAC
Efficiency:	70% typical at full load (60% for LPT41)
EMI:	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:	40W for convection; 55W with 30CFM forced air
Cross regulation:	± 2% on output 1; ± 5% on outputs 2, 3
Adjustment range:	-5, +10% minimum
Hold-up time:	20ms @ 40W load, 115 VAC nominal line
Overload protection:	Short circuit protection on all outputs. Case overload protected @ 110% to 145% above peak rating
Overvoltage protection:	5.7 to 6.7 VDC on the main output LPT41: 3.6 to 4.6VDC
Remote sense:	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.





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# **Environmental Specifications**

Operating temperature:	0° to 50 °C ambient derate each output at 2.5% per degree from 50° to 70 °C, -20 °C start up.
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 0.75G 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

Ordering Information							
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection cooling	Maximum Load with 30CFM Forced Air	Peak Load¹	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
	+5V	0.4A	4A	5A	7A	±2%	50mV
LPT42-M	+12V	0.2A	2A	2.5A	4A	±5%	120mV
	-12V	0A	0.5A	0.7A	1A	±5%	120mV
	+5V	0.4A	4A	5A	7A	±2%	50mV
LPT45-M	+15V	0.2A	2A	2.5A	3A	±5%	150mV
	-15V	0A	0.5A	0.7A	1A	±5%	150mV

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  $\mu\text{F}$  in parallel with a 0.1  $\mu\text{F}$  capacitor at rated line voltage and load ranges.

4. Minimum Loads are required.



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## Mechanical Drawing



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

## Mating Connectors

AC Input:	Molex 09-50-8031 (USA) 09-91-0300 (UK) PINS: 08-52-0113
DC Outputs:	Molex 09-50-8061 (USA) 09-91-0600 (UK) PINS: 08-52-0113
Remote Sense:	Molex 22-01-2025 PINS: 08-52-0123
E 8	

Emerson Network Power 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"  $(\pm 0.5 mm)$
- 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

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