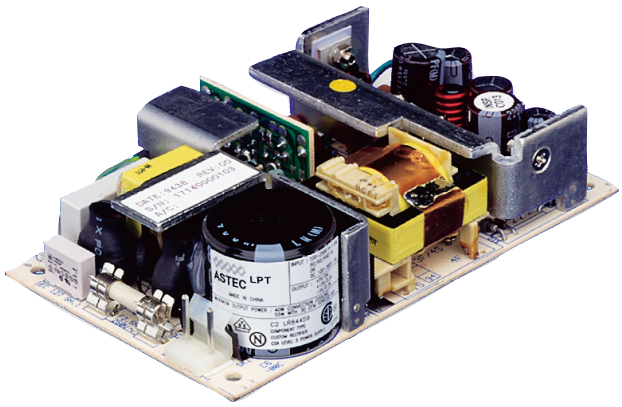
Embedded Power for
Business-Critical Continuity

LPT40 Series

40 Watts

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



RoHS 2002/95/EC

Special Features

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

Safety

- **UL** UL60950
  E132002
- **CSA** CSA 22.2-234 Level 3
  LR53982C
- **NEMKO** EN 60950/EMKO-TUE
  P95100411
  (74-sec) 203
- **CB** Certificate and report
  1118, 1122, 1123, 1124
- **CE** Mark (LVD)

Electrical Specifications

Input	
Input range:	85-264 VAC 120-300 VDC
Frequency:	47-440 Hz
Inrush current:	< 18 A peak @ 115 VAC; < 36A peak @ 230 VAC, cold start @ 25 °C
Input current:	1A max. (RMS) @ 115 VAC
Efficiency:	70% typical at full load (60% for LPT41)
EMI:	FCC Class B conducted; CISPR 22 Class B conducted EN55022 Class B conducted; VDE 0878 PT3 Class B conducted
Safety ground leakage current:	< 0.5 mA @ 50/60 Hz, 264 VAC input

Output	
Maximum Power:	40W for convection (LPT41, 25W); 55W with 30CFM forced air (LPT41, 41W)
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.

ASTEC

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Environmental Specifications

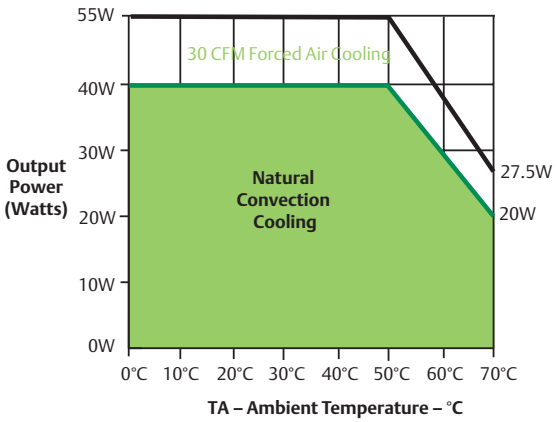
Operating temperature:	0° to 50 °C ambient derate each output at 2.5% per degree from 50° to 70 °C, -20 °C start up.
Electromagnetic susceptibility:	Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3
Humidity:	Operating; non-condensing 5% to 95%
Vibration:	Three orthogonal axes, sweep at 1 oct/min, 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

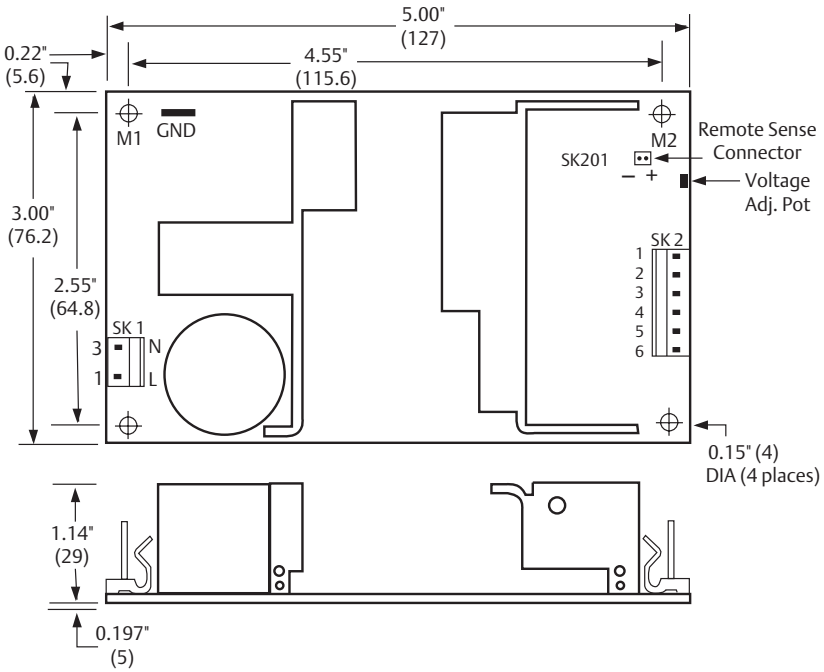
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection cooling	Maximum Load with 30CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P (PARD)[3]
LPT41(-T)	+3.3V	0.5A	4A	7A	7A	±2%	50mV
	+5V	0A	1.5A	2.0A	2.5A	±2%	50mV
	+12V	0A	0.5A	0.7A	0.7A	±5%	120mV
LPT42(-T)	+5V	0.4A	4A	5A	7A	±2%	50mV
	+12V	0.2A	2A	2.5A	4A	±5%	120mV
	-12V	0A	0.5A	0.7A	1A	±5%	120mV
LPT43(-T)	+5V	0.5A	6A	8A	9A	±2%	50mV
	+12V	0A	0.5A	0.7A	1A	±5%	120mV
	-12V	0A	0.5A	0.7A	1A	±5%	120mV
LPT44(-T)	+5V	0.4A	4A	5A	7A	±2%	50mV
	+12V	0.2A	2A	2.5A	4A	±5%	120mV
	-5V	0A	0.5A	0.7A	1A	±5%	50mV
LPT45(-T)	+5V	0.4A	4A	5A	7A	±2%	50mV
	+15V	0.2A	2A	2.5A	3A	±5%	150mV
	-15V	0A	0.5A	0.7A	1A	±5%	150mV
LPT46(-T)	+5V	0.4A	4A	5A	6A	±2%	50mV
	+24V	0.1A	1.0A	1.5A	2A	±7%	240mV
	+12V	0A	0.5A	0.7A	1A	±5%	120mV
LPT47(-T)	+5V	0.4A	4A	5A	6A	±2%	50mV
	+24V	0.2A	1.0A	1.5A	2A	±7%	240mV
	-12V	0A	0.5A	0.7A	1A	±5%	120mV

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.
5. (-T) indicates Terminal Block option for input and output (instead of Molex type)

Power Derating Curve



Mechanical Drawing



Pin Assignments

Connector	LPT41	LPT42	LPT43	LPT44	LPT45	LPT46	LPT47
SK1-1	Line	Line	Line	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
SK2-1	5V	+12V	+12V	+12V	+15V	+24V	+24V
SK2- 2	3.3V	+5V	+5V	+5V	+5V	+5V	+5V
SK2- 3	3.3V	+5V	+5V	+5V	+5V	+5V	+5V
SK2-4	Common	Common	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common	Common	Common
SK2-6	12V	-12V	-12V	-5V	-15V	+12V	-12V
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense	-Sense	-Sense	-Sense

Mating Connectors

AC Input: Molex 09-50-8031 (USA) Not required for (-T) option
09-91-0300 (UK)
PINS: 08-52-0113

DC Outputs: Molex 09-50-8061 (USA) Not required for (-T) option
09-91-0600 (UK)
PINS: 08-52-0113

Remote Sense: Molex 22-01-2025
PINS: 08-52-0123

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" (±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

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