

# **LPT25 Series**

25 Watts



## **Electrical Specifications**

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Input				
Input range	85 - 264 Vac; 120 - 300 Vdc			
Frequency	47 - 440 Hz			
Inrush current	< 15 A peak @ 115 Vac; < 30 A peak @ 230 Vac, cold start @ 25 °C			
Input current	1A max. (RMS) @ 115 Vac			
Efficiency	70% typical at full load			
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	25 W for convection; 40 W with 30CFM forced air			
Cross regulation	$\pm 2\%$ on output 1; $\pm 5\%$ on outputs 2, 3			
Adjustment range	-5, +10% minimum			
Hold-up time	20 ms @ 25 W 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			
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.			



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Data Sheet

Total Power: 25 - 40 Watts Input Voltage: 85 - 264 Vac 120 - 300 Vdc # of Outputs: 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 main output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available
- RoHS compliant
- Two year warranty

#### SAFETY

TUV	60950 11774-3336-1241 (LC#84936)
UL	UL60950 E132002
■ cUL	60950 LR53982C
NEMKO	EN 60950/EMKO-TUE P95100411 (74-sec) 203
CB	Certificate and report 1569, 1570, 1571, 1572
CE	Mark (LVD)



Environmental Specifications			
Operating temperature	0 °C to 50 °C ambient derate each output at 2.5% per degreefrom 50 °C 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. dwellat four major resonances 0.75 G peak 5 Hz to 500 Hz, operational		
Storage temperature	-40 °C 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 <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P(PARD) <sup>3</sup>
LPT22	5 V	0.3 A	3 A	4 A	5 A	±2%	50 mV
	12 V	0.1 A	1.5 A	2 A	3 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
LPT23	5 V	0.4 A	4 A	5 A	6 A	±2%	50 mV
	12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
LPT24	5 V	0.3 A	3 A	4 A	5 A	±2%	50 mV
	12 V	0.1 A	1.5 A	2 A	3 A	±5%	120 mV
	-5 V	0 A	0.5 A	0.7 A	1 A	±5%	50 mV
LPT25	5 V	0.3 A	3 A	4 A	5 A	±2%	50 mV
	15 V	0.1 A	1.5 A	2 A	2 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.

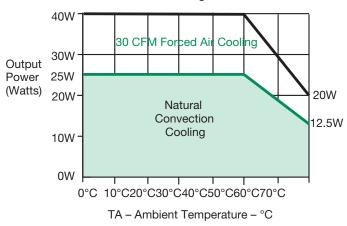
2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.

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.

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

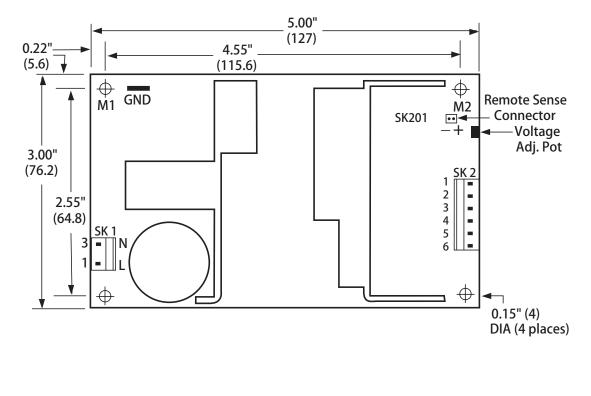
6. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

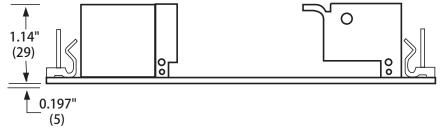


#### Power Derating Curve



## Mechanical Drawing









Pin Assignments				
Connector	LPT22	LPT23	LPT24	LPT25
SK1-1	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral
SK2-1	+12V	+12V	+12V	+15V
SK2-2	+5V	+5V	+5V	+5V
SK2-3	+5V	+5V	+5V	+5V
SK2-4	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common
SK2-6	-12V	-12V	-5V	-15V
SK201-1	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense

Mating Connectors			
AC Input	Molex 09-50-8031 (USA) 09-93-0300 (UK) PINS: 08-52-0113		
DC Outputs	Molex 09-50-8061 (USA) 09-93-0600 (UK) PINS: 09-93-0600 (UK)		
Remote Sense	Molex 22-01-2025 PINS: 08-52-0123		
Astec 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,  $25^{\circ}$ C unless otherwise stated.
- 6. Warranty: 2 year
- 7. Weight: 0.5lbs/0.23kg

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