Rev. 08.17.07 LPS150 Series 1 of 3

# LPS150 Series

150 Watts

Total Power: 100 - 150 Watts Input Voltage: 85-132 / 170-264 Vac

220 - 300 Vdc

# of Outputs: Single





## **Electrical Specifications**

### **Special Features**

- · Auto ranging input
- Remote sense
- Remote inhibit
- Power fail
- Single wire current sharing
- Built-in EMI filter
- Low output ripple
- Adjustable output
- 135 khz switching frequency
- Overvoltage protection
- Overload protection
- Optional cover (-C suffix)

### Safety

**VDE** 0805/EN60950 (IEC950)

11774-3336-1260

(LC#88585) **UL** UL1950 EI32002

**CSA** CSA 22.2-234 Level 3

LR53982

**NEMKO** EN 60950/EMKO-TUE

P95102999 (74-sec) 203

**BABT** EN60950/BS7002

607019

**CB** Certificate and report

2062

**CE** Mark (LVD)

## Input

Input range	85 - 132 Vac or 170 - 264 Vac automatically selected;
iliput lalige	220 2007/4-

220 - 300 Vdc

Frequency 47 - 63 Hz

Inrush current 38 A max, cold start @ 25 °C
Efficiency 75% typical at full load

FCC Class B conducted CISPR 22 Class B conducted EN55022 Class B conducted VDE 0878 PT3 Class B conducted

Safety ground 0.5 mA @ 50/60 Hz, 264 VAC input

leakage current

Output

EMI filter

Maximum power 110 W convection (75 W with cover)

150 W with 30 CFM forced air (130 W with cover)

Adjustment range ± 5% minimum on the main outputs

Hold-up time 20 ms @ 110 W load, 115/230 Vac nominal lline

Overload protection Short circuit protection. Case overload protected @ 110% to 145% above

peak rating

Overvoltage protection 5 V output: 5.7 to 6.7 VDC. Other outputs 10% to 25% above nominal

output

**Logic Control** 

Power failure TTL Logic signal goes high 50 - 150 msec after 5 V output. It goes low at

least 3 ms before loss of regulation

Remote inhibit Requires an external TTL high signal to inhibit outputs

Remote sense Compensates for 0.5 V lead drop minimum, 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

Storage temperature:  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$ Temperature coefficient:  $\pm 0.4\%$  per  $^{\circ}\text{C}$ 

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 0.75G

peak 5Hz to 500Hz, operational

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>
LPS152	5 V	0 A	22 A	30 A	35 A	± 2%	50 mV
LPS153	12 - (15) V	0 A	9.1 A	12.5 A	14.5 A	± 2%	150 mV
LPS155	24 - (28) V	0 A	4.5 A	6.2 A	7.2 A	± 2%	280 mV, max.

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

Pin .	Assign	ments			
Connector		LPS152	LPS153	LPS15	5
SK1	PIN 1	INHIBIT -ve	INHIBIT -ve	INHIBI	T -ve
	PIN 2	INHIBIT +ve	INHIBIT +ve	INHIBI	T +ve
	PIN 3	VCC	VCC	VCC	
	PIN 4	No Connection	No Connection	No Co	nnection
	PIN 5	COMMON	COMMON	COMN	ION
	PIN 6	-SENSE	-SENSE	-SENSI	
	PIN 7	+SENSE	+SENSE	+SENS	E
	PIN 8	C SHARE	C SHARE	C SHA	RE
SK2	PIN 5	COMMON	COMMON	COMN	ION
	PIN 6	PIN REMOVED	PIN REMOVED	PIN RE	MOVED
	PIN 7	POK	POK	POK	
SK3	TB-1	COMMON	COMMON	COMN	ION
	TB-2	+5 V	+5 V	+5 V	
SK4	PIN 1	GROUND	GROUND	GROU	ND
	PIN 3	LINE	LINE	LINE	
	PIN 5	NEUTRAL	NEUTRAL	NEUT	AL
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AC input (SK4): Molex 09-50-8051 (USA) Molex 09-91-0500 (UK) PINS: 08-58-0111 Power fail (SK2): Molex 09-50-8031 (USA) Molex 09-91-0300 (UK) PINS: 08-58-0111

Remote Molex 51110-0851 (USA) sense/ PINS: 50394-8100 Remote in hishite

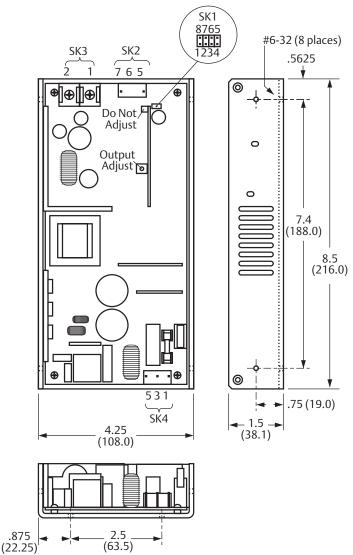
inhibit (SK1):

Astec Connector Kit #70-841-009, includes all of the above

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is  $\pm 0.02$ " ( $\pm 0.5$ mm)
- 3. Specifications are for convection rating at factory settings unless otherwise stated
- 4. Remote inhibit requires an external 5V @ 10mA to activate.
- 5. Mounting (6-32) maximum insertion depth is 0.12".
- 6. Warranty: 2 year
- 7. Weight: 1.75 lbs/0.80 kg

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