# 150 Watts LPS150 Series

Total Power: 110-150 Watts Input Voltage: 85-132 | 170-264 VAC

220-300 VDC

# of Outputs: Single



## **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).

### **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 Specs**

Input

Input range 85-132 VAC

or 170-264 VAC automatically

selected. 220-300 VDC

Frequency 47-63 Hz

Inrush current

38 A max, cold start @ 25°C

Efficiency

75% typical at full load

EMI filter

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 110 W convection (75 W with cover)

150 W with 30 CFM forced air

(130 W with cover)

Adjustment range ±5% minimum

Hold-up time 20 ms @ 110 W load, 115/230 VAC

nominal line

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.

## 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)



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#### ASIA

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## **Ordering Information**

Model	Output	Minimum	Maximum Load with	Maximum Load with	Peak	Regulation2	Ripple
Number	Voltage	Load	Convection Cooling	30 CFM Forced Air	Load1		P/P (PARD)3
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	0A	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 and load ranges. Note: -C suffix added to the model number indicates cover option.

## **Pin Assignments**

Connector		LPS152	LPS153	LPS155	
SK1	PIN 1	INHIBIT -ve	INHIBIT -ve	INHIBIT -ve	
	PIN 2	INHIBIT +ve	INHIBIT +ve	INHIBIT +ve	
	PIN 3	VCC	VCC	VCC	
	PIN 4	No Connection	No Connection	No Connection	
	PIN 5	COMMON	COMMON	COMMON	
	PIN 6	-SENSE	-SENSE	-SENSE	
	PIN 7	+SENSE	+SENSE	+SENSE	
	PIN 8	C SHARE	C SHARE	C SHARE	
SK2					
	PIN 5	COMMON	COMMON	COMMON	
	PIN 6	PIN REMOVED	PIN REMOVED	PIN REMOVED	
	PIN 7	POK	POK	POK	
SK3	TB-1	COMMON	COMMON	COMMON	
	TB-2	+5 V	+12 to +15 V	+24 to +28 V	
SK4	PIN 1	GROUND	GROUND	GROUND	
	PIN 3	LINE	LINE	LINE	
	PIN 5	NEUTRAL	NEUTRAL	NEUTRAL	

#### **Mating Connectors**

(SK4) AC Input: Molex 09-50-8051 (USA)

Molex 09-91-0500 (UK) PINS: 08-58-0111

(SK2) Power fail: Molex 09-50-8031 (USA)

Molex 09-91-0300 (UK) PINS: 08-58-0111

(SK1) Remote sense/Remote inhibit:

Molex 51110-0851 (USA) Pins: 50394-8100

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

- 1. Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance is ±.02".
- Specifications are for convection rating at factory settings unless otherwise stated.
- Remote inhibit requires an external 5V @ 10mA to activate.
- Mounting (6-32) maximum insertion depth is 0.12".
- 6. Warranty: 1 year7. Weight: 1.75 lb. / 0.80 kg



