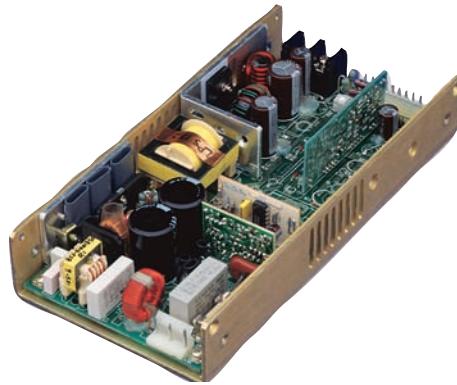


## LPS150 Series

150 Watts

**Total Power:** 100 - 150 Watts  
**Input Voltage:** 85-132 / 170-264 Vac  
                   220 - 300 Vdc  
**# of Outputs:** Single



## Electrical Specifications

### 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 on the main outputs
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



### 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)



## 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 °C to +85 °C
Temperature coefficient:	± 0.4% per °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.

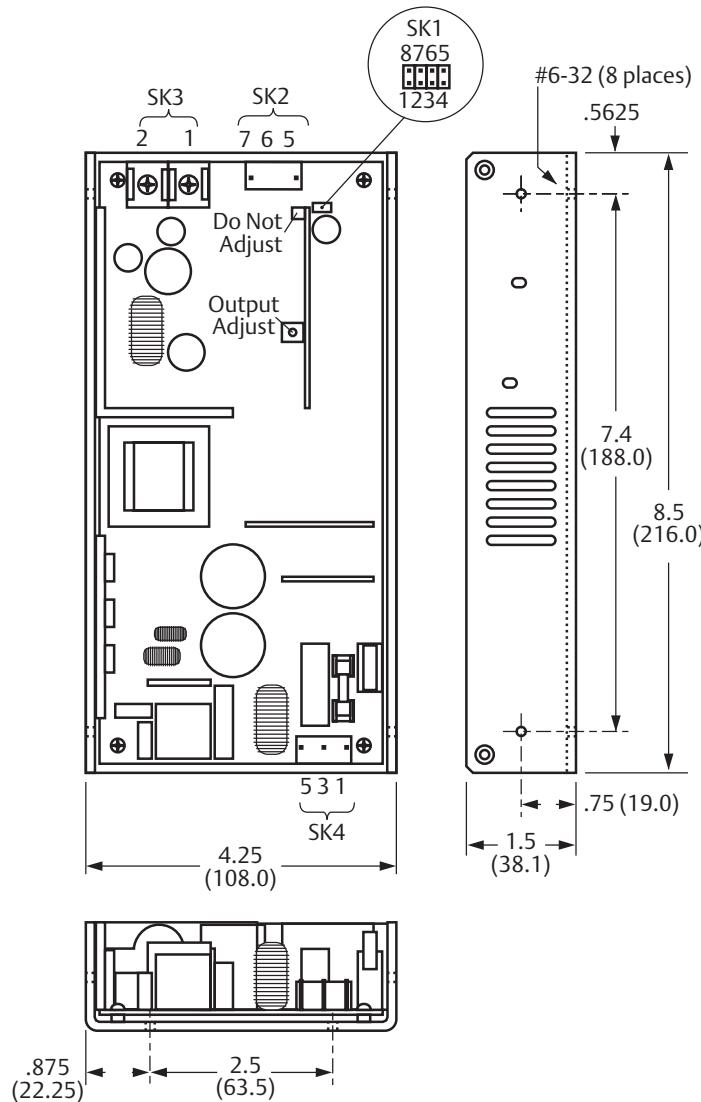
2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.

3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

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	+5 V	+5 V
SK4	PIN 1 GROUND	GROUND	GROUND
	PIN 3 LINE	LINE	LINE
	PIN 5 NEUTRAL	NEUTRAL	NEUTRAL

Mating Connectors	
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 sense/ Remote inhibit (SK1):	Molex 51110-0851 (USA) PINS: 50394-8100
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 ±0.02" (±0.5mm) 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	

Mechanical Drawing



Rev. 08.17.07  
LPS150 Series  
3 of 3

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