

# LPS 150

150 Watts

## LPS 150 Series

<b>Total Power</b>	<b>110 - 150 Watts</b>
<b>Input Voltages</b>	<b>85 - 132 / 170 - 264 VAC 220 - 370 VDC</b>
<b># of Outputs</b>	<b>Single</b>



### SPECIAL FEATURES

- Auto ranging input
- Remote sense
- Remote inhibit
- Power fail
- Single wire current sharing
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Overvoltage protection
- Overload protection
- 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 SPECIFICATIONS

#### Input

Input range ..... 85-132 VAC  
or 170-264 VAC automatically selected.  
220-370 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

<b>VDE</b>	0805/EN60950 (IEC950)	11774-3336-1260 (LC#88585)
<b>UL</b>	UL1950	EI32002
<b>CSA</b>	CSA 22.2-234 Level 3	LR53982
<b>NEMKO</b>	EN 60950/EMKO-TUE (74-sec) 203	P95102999
<b>BABT</b>	EN60950/BS7002	607019
<b>CB</b>	Certificate and report	2062
<b>CE</b>	Mark (LVD)	

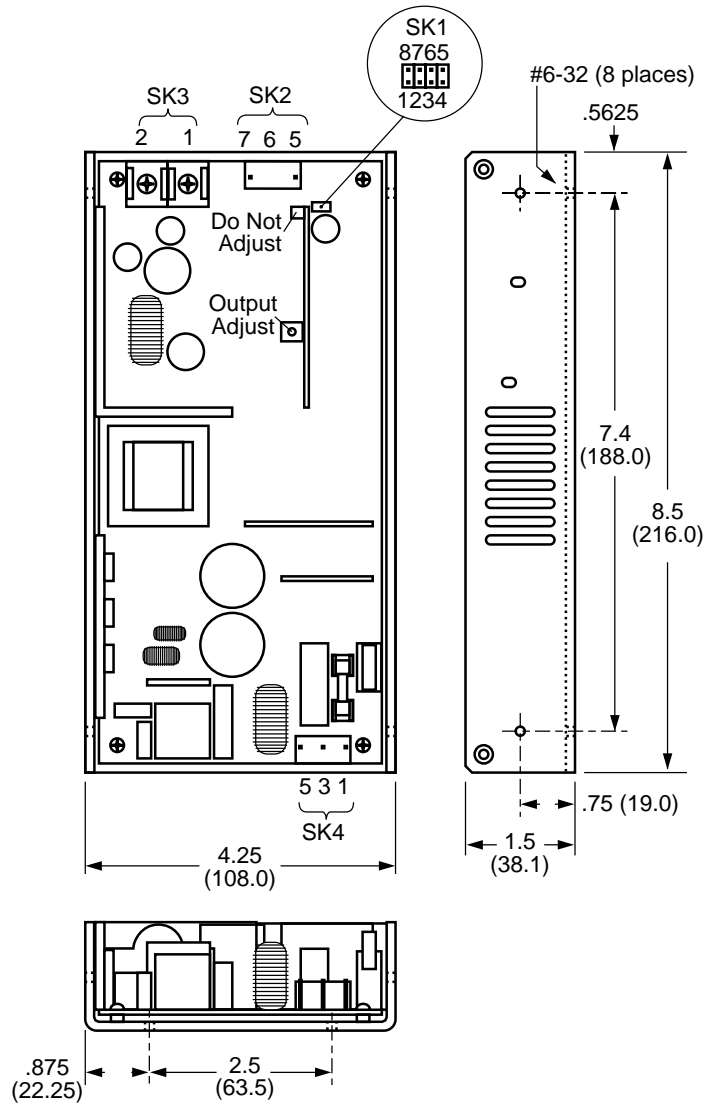


## ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PAR) <sup>3</sup>
LPS152-C	5 V	0 A	22 A	30 A	35 A	±2%	50 mV
LPS153-C	12-(15) V	0 A	9.1 A	12.5 A	14.5 A	±2%	150 mV
LPS155-C	24-(28) V	0A	4.5 A	6.2 A	7.2 A	±2%	280 mV, max.
LPS156-C	36-(48) V	0A	3.1A	4.2A	4.9A	±2%	480 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 and load ranges.
  4. Output voltage factory set at lower values.
- Note: -C suffix added to the model number indicates cover option.

## DRAWINGS



## PIN ASSIGNMENTS

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

LPS150

## MATING CONNECTORS

- (SK4) AC Input: Molex 09-50-8051 (USA)  
Molex 24-03-4050 (UK)  
PINS: 08-58-0189
- (SK2) Power fail: Molex 09-50-8031 (USA)  
Molex 24-03-4030 (UK)  
PINS: 08-58-0189
- (SK1) Remote sense/Remote inhibit:  
Molex 51110-0851 (USA)  
Pins: 50394-8100

Astec Connector Kit #70-841-009

## NOTES

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
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 0.15".
6. Warranty: 1 year
7. Weight: 1.75 lb. / 0.80 kg
8. Current share: Connect to same pin on the second power supply to enable current share.

