

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 (74-sec) 203	P95102999
BABT	EN60950/BS7002	607019
CB	Certificate and report	2062
CE	Mark (LVD)	

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Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load ¹	Regulation ²	Ripple 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.
LPS156	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.
- Note: -C suffix added to the model number indicates cover option.

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

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 all of the above.

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 0.12".
6. Warranty: 1 year
7. Weight: 1.75 lb. / 0.80 kg

