LPT80 Series

80 Watts

Total Power: 55 - 85 Watts
Input Voltage: 85-264 Vac
120-370 Vdc
# of Outputs: Triple

RoHS 2002/95/EC

Special Features

- Power Factor Correction
- EN61000-3-2 compliant
- Universal input
- 3" x 5" footprint
- Remote sense on outputs 1 (& 2 for LPT81)
- Power fail and remote inhibit
- Wide range adjustable on outputs 1 (& 2 for LPT81)
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection

Safety

VDE	60950
UL	60950
CSA	60950
NEMKO	60950
AUSTEL	60950
CB	Certificate & report
CE	Mark LVD

Electrical Specifications

Input	
Input range:	85-264 Vac; 120-300 Vdc
Frequency:	47-440 Hz
Inrush current:	<18 A peak @ 115 Vac; <36 A peak @ 230 Vac, cold start @ 25 °C
Input current:	1.5 A max. (RMS) @ 115 Vac
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:	<1 mA @ 50/60 Hz, 264 Vac input
Output	
Maximum power:	60 W for convection(LPT81, 55 W); 85 W with 30 CFM forced air
Adjustment range:	3.3 V - 5.5 V on outputs one (and two 1.8 V - 3.5 V for LPT81)
Hold-up time:	20 ms @85 W load, 115 Vac nominal line
Overload protection:	Short circuit protection on all outputs. Case overload protected @ 145% above peak rating
Overvoltage protection:	Tracks outputs 1(& 2 for LPT81): 20% to 35% above output setting

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Logic Control

Power failure	TTL logic signal goes high 100 - 500 msec after V1 output; It goes low at least 4 msec before loss of regulation
Remote inhibit	Requires contact closure to inhibit outputs
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

Environmental Specifications

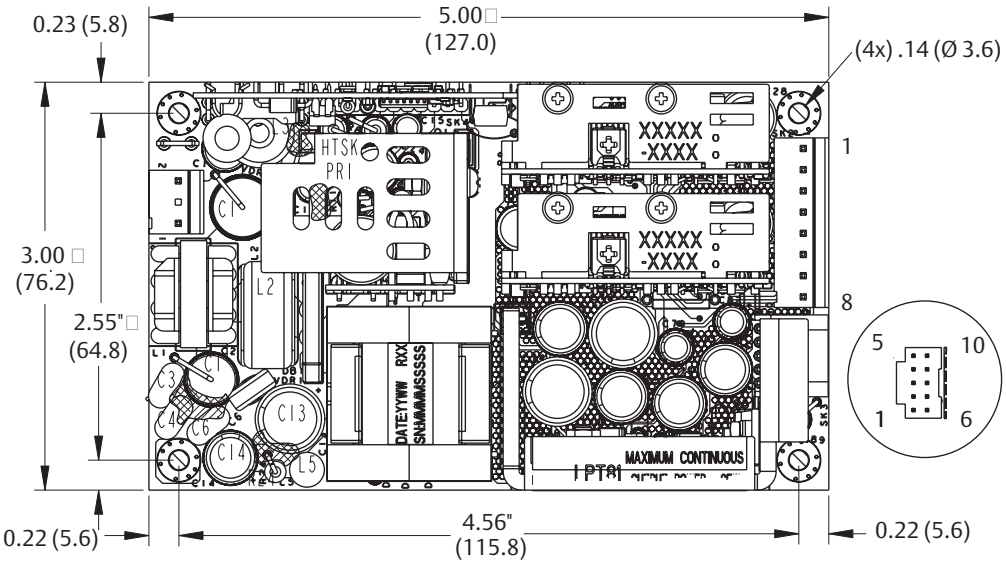
Operating temperature:	0° to 50 °C ambient; derate each output at 2.5% per degree from 50° to 70°C
Temperature coefficient:	±0.4% per °C
Storage temperature:	-40° to 85 °C
Electromagnetic susceptibility:	Designed to meet IEC EN61000-4, -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 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
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 [1]	Regulation [2]	Ripple P/P (PARD)[3]
LPT81	+3.3 V (1.8 - 3.5 V)	0.7 A	8.0 A	13 A13 A	15 A	±2%	50 mV
	+5 V (3.3 - 5.5 V)	0.3 A	4.0 A	1.0 A	15 A	±2%	50 mV
	+12 V	0	0.7 A		1.5 A	±5%	120 mV
LPT82	+5 V (3.3 - 5.5 V)	0.7 A	8.0 A	13 A	15 A	±2%	50 mV
	+12 V	0.3 A	3.0 A	4.0 A	4.6 A	±5%	120 mV
	-12 V	0	0.7 A	1.0 A	1.5 A	±5%	120 mV
LPT83	+5 V (3.3 - 5.5 V)	0.7 A	8.0 A	13 A	15 A	±2%	50 mV
	+15 V	0.3 A	2.4 A	3.2 A	3.7 A	±5%	150 mV
	-15 V	0	0.7 A	0.7 A	1 A	±5%	150 mV

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.
4. Minimum loads are required
5. Total current of all outputs can not exceed 21 A.

Mechanical Drawing



Pin Assignments

Connector		LPT81	LPT82/83
SK1	Pin1	Neutral	Neutral
	Pin3	Line	Line
SK2	Pin1	V1 (3.3V)	V1 (5 V)
	Pin2	V1 (3.3V)	V1 (5 V)
	Pin3	Common	Common
	Pin4	Common	Common
	Pin5	Common	Common
	Pin6	V2 (5V)	V2 (12/15V)
	Pin7	V2 (5V)	V2 (12/15V)
	Pin8	V3 (12V)	V3 (-12V/15)
SK3	Pin1	+V1 Remote sense	+V1 Remote sense
	Pin2	-V1 Remote sense	-V1 Remote sense
	Pin3	+Remote inhibit	+Remote inhibit
	Pin4	-Remote inhibit	-Remote inhibit
	Pin5	+Power fail	+Power fail
	Pin6	Common	Common
	Pin7	No connection	No connection
	Pin8	+V2 sense	No connection
	Pin9	-V2 sense	No connection
	Pin10	No connection	No connection

Mating Connectors

(SK1)AC Input:	Molex 09-50-8031 (USA) 09-91-0300 (UK) PINS: 08-58-0111
(SK2)DC Outputs:	Molex 09-50-8081 (USA) 09-91-0800 (UK) PINS: 08-58-0111
(SK3) Control Signals:	Molex 90142-0010 (USA) PINS: 90119-2110 or Amp: 87977-3 PINS: 87309-8
Astec connector kit:	#70-841-018 includes all the above

Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. Mounting holes M1, M2 and M3 should be grounded for EMI purposes.
4. Mounting hole M1 is safety ground connection.
5. Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
6. Warranty: 2 year
7. Weight: 0.8 lb. / 0.36 kg

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