Embedded Power for
Business-Critical Continuity

LPS120 Series

120 Watts

Total Power: **80 - 130 Watts**
Input Voltage: **85 - 264 VAC**
# of Outputs: **Single**

RoHS 2002/95/EC

Special Features

- Active power factor correction
- 3" x 5" footprint
- Less than 1U high
- EN61000-3-2 compliant
- Remote sense
- Power fail and remote inhibit
- Single wire current sharing
- Adjustable main output
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection
- 5 V Standby output and 12V Fan output

Safety

TUV	60950
UL	60950
CSA	60950
NEMKO	60950
AUSTEL	60950
CB	Certificate and report
CE	Mark (LVD)

Electrical Specifications

Input	
Input range	85 - 264 VAC ; 127 - 300VDC
Frequency	47-440 Hz
Inrush current	40A max., cold start @ 25°C
Efficiency	80% typical at full load
EMI/RFI	FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B conducted; VDE0878PT3 Class B conducted
Power factor	0.99 typical
Safety ground leakage current	0.5mA @ 50/60 Hz, 264 VAC input
Output	
Maximum power	80W for convection ; 130W with 30CFM forced air
Adjustment range	±5% minimum on the main outputs
Fan output	12V @ 500mA - 5%, +7%
Standby outputs	5V @ 500mA ±5%
Hold-up time	20ms @ 125W load, 120VAC input
Overload protection	Short circuit protection on all outputs. Case overload protected @ 120-135% above rating
Overvoltage protection	20-35% above nominal output
Remote sense	Compensates for 0.5 V lead drop max. Will operate without remote sense connected. Reverse connection protected.
Logical Control	
Power failure	TTL logic signal goes high 100-500 msec after main output; it goes low at least 4 msec before loss of regulation
Remote inhibit	Requires a contact closure to disable the outputs, except 5V standby.
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

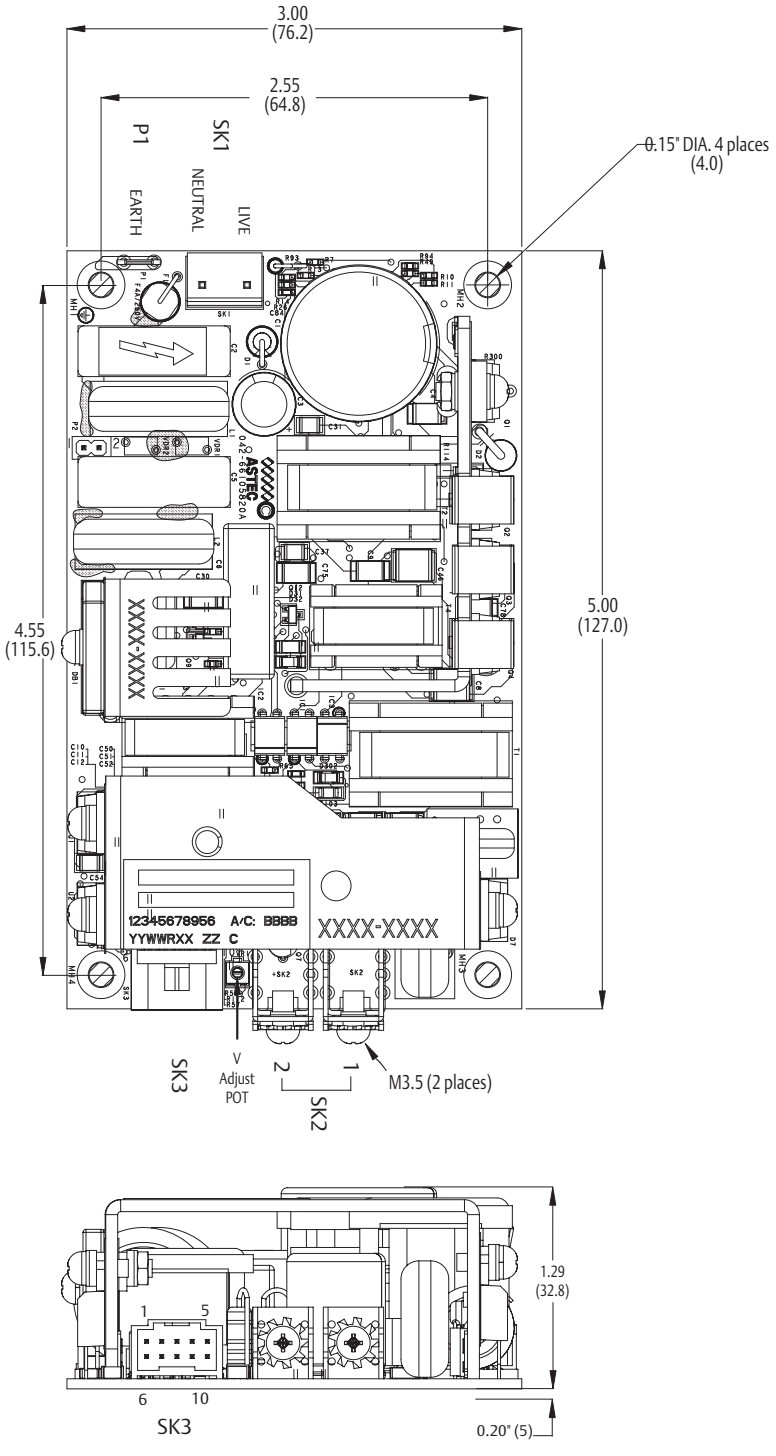
ASTEC

EMERSON Network Power

Environmental Specifications

Operating temperature:	0° to 50°C ambient derate each output as 2.5% per degree from 50° to 70°C. -20°C start up
Storage temperature:	-40°C to +85°C
Electromagnetic susceptibility:	designed to meetEN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 10% to 95% RH
Vibration:	IEC68-2-6 to the levels of IEC721-3-2
MTBF demonstrated	>550,000 hours at full load and 25°C ambient conditions

Mechanical Drawing



Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 300CFM Forced Air	Peak Load	Regulation[2]	Ripple P/P (PARD)[3]
LPS121	3.3V	0A	21A	36A	29A	±2%	50mV
LPS122	5V	0A	16A	26A	29A	±2%	50mV
LPS123	12V	0A	6.7A	10.8A	12.8A	±2%	120mV
LPS124	15V	0A	5.3A	8.7A	10.0A	±2%	150mV
LPS125	24V	0A	3.4A	5.4A	6.3A	±2%	240mV
LPS128	48V	0A	1.7A	2.7A	3.2A	±2%	480mV

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 (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

Pin Assignments

Connector	*LPS120*	
SK1	Pin1	Neutral
	Pin3	Line
SK2	TB-1	COMMON
	TB-2	Main output
SK3	Pin1	+V1 Remote sense
	Pin2	-V1 Remote sense
	Pin3	+Remote inhibit
	Pin4	-Remote inhibit
	Pin5	+Power fail
	Pin6	Common
	Pin7	SWP
	Pin8	+12V
	Pin9	12V common
	Pin10	+5V standby

Mating Connectors

(SK1)AC Input: Molex 09-50-8031 (connector) 08-52-0113 (pins)

(SK2)DC Output: Molex series 19141-0058/0063 Spade lug

(SK3) Control Signals:
Molex 90142-0010 (USA)
PINS: 90119-2110 or
Amp: 87977-3
PINS: 87309-8

Astec Connector Kit # 70-841-020, includes all of the above.

Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. mounting holes MH1, MH2, MH3 should be grounded for EMI purpose
4. Mounting MH1 is safety ground connection
5. Specifications are for convection rating at factory settings at 115 VAC input 25 C deg unless otherwise stated.
6. This power supply requires mounting on metal standoffs 0.20" (5m) in height.
7. Warranty: 1 year
8. Weight: 0.71 lb. / 0.32 kg

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