



**LIEN ENGINEERING, INC.**

# **UNIVERSAL OPEN FRAME POWER SUPPLIES**

**SP15W1P-249x  
15 WATT SINGLE OUTPUT  
SWITCHING POWER SUPPLY**



## **FEATURES:**

- Auto Selecting, Full Range 90 - 260 VAC Input
- Proven High Reliability Design
- High Efficiency
- UL, CSA, TUV Approved
- On Board EMI/RFI Filtering - Meets FCC Class B
- Fan and Power "ON" LED outputs
- Reliable MOS-FET design

For over 25 years, Lien Engineering, Inc. has been producing innovative Power Conversion and Enclosure Products for Large and Small Computers, Computer Peripherals, Medical, Communications, and other Industrial requirements.

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Doc. #SP15W1P-249 R-10292003

# SPECIFICATIONS

## INPUT

INPUT VOLTAGE: 90VAC to 260VAC  
47 - 63 Hz  
No external jumpers or switching required  
INRUSH CURRENT: <30A Peak @ 115VAC  
<15A Peak @ 230VAC  
INPUT CURRENT: 1A Max RMS @ 115VAC  
EFFICIENCY: >75% Typical at full load  
EMI FILTER: Meets FCC Class B

ADJUSTMENT RANGE:  $\pm 10\%$  Rated output  
CROSS REGULATION:  $\pm 2\%$  for +5V;  $\pm 6\%$  for -5V;  $\pm 7\%$  for +12V  
NOISE: (mv P-P) 60mV for +5V; 60mV for -5V; 100mV for +12V  
HOLD-UP TIME: 12ms Minimum at full load and 115VAC nominal line  
LINE REGULATION: 0.5% Maximum  
PROTECTION: Foldback @ 105% to 150% of rated output

Auto recovery

5.6VDC  $\pm 10\%$  for +5V

Continuous short circuit protection

## OUTPUT

OUTPUT RATING: (Amps)+5VDC @ 0.2 - 1.5  
-5VDC @ 0.05 - 0.5  
+12VDC @ 0.5

"Power ON" LED output: +5VDC with onboard  
270 $\Omega$  limit resistor

RIPPLE & NOISE: 1% Peak to peak maximum  
of all outputs

## ENVIRONMENTAL

OPERATING TEMPERATURE: 0°C to 50°C

STORAGE TEMPERATURE: -40°C to 85°C

MTBF: >50,000 POH at maximum  
operating temperature

DIMENSIONS: 90mm x 53mm x 25.4mm

MODEL	POWER	VOLTAGE	CURRENT	
			Min.	Max.
SP15W2P-249	15W	+5V	0.2A	1.5A
		+12V	0.05A	0.5A
SP15W1P-249A	15W	+5V	-	3.0A
SP15W1P-249B	15W	+12V	-	1.25A
SP15W1P-249C	15W	+15V	-	1.0A
SP15W1P-249D	15W	+24V	-	0.62A
SP15W1P-249E	15W	+48V	-	0.31A

