



## Features

- Energy Star and California Energy Commission Regulations compliant
- RoHS Compliant
- 100-120 VAC input
- Regulated output voltage
- Over-load protected
- Short-circuit protected
- UL/cUL certified and FCC class B compliant
- Designed to replace linear AC-DC adapters which are unable to meet CEC mandatory efficiency requirements



## Models

Model	Output Voltage	Output Current		Max. Power	Ripple & Noise (mVpp) <sup>1</sup>
		Minimum	Maximum		
EPS045100-P7P	4.5 V	0 A	1.0 A	4.5 W	100

### Notes:

1. Ripple & Noise measured at 20 MHz BW, with a 0.1  $\mu$ F ceramic cap and a 10  $\mu$ F electrolytic cap on the output.

## Input

Parameter	Conditions/Description	Min	Nom	Max	Units
Input frequency		47		63	Hz
Input voltage		100	120	130	VAC
Inrush current	Peak measured at 120 VAC. Inrush lasts no more than 0.5mS before settling to steady state current.			40	A
Power dissipation	Input: 100~120VAC; Output: no load			0.5	W



## Output

Parameter	Conditions/Description	Min	Nom	Max	Units
Line regulation	Low line to high line at full load	-2		+2	%
Load regulation	Full load to no load, under 5V	-5%		+0.25V	
Overshoot	At turn-on and turn-off		0		%
Undershoot	At turn-on and turn-off		0		%
Temp. coefficient	0 to 40°C, full load, after initial 1 hour warm up	-0.02		+0.02	%/°C
Start-up time	Time needed to reach regulation			3	S
Hold-up time	@ 115 Vac, Full load	10			mS
Output Connector	Center positive				
Output power limit	Primary power limited				

## Protection Circuit

Parameter	Conditions/Description
Overload	Fold-back current limiting starts at 105-160% of the rated output current. Recovers automatically. Long term exposure to overloaded condition may reduce product reliability.
Short circuit	Short circuit can be continuous. Recovers automatically upon removal of short.

## General and Safety

Parameter	Conditions/Description	Min	Nom	Max	Units
Efficiency	Energy star level-IV				
Operating temp.		0		40	°C
Storage temp.		-20		85	°C
Operating humid.	Non-condensing	10%		90%	RH
Storage humid.	Non-condensing	10%		90%	RH
Leakage current	at 120 VAC			0.5	mA
Isolation voltage (HI-POT)	Applied for 1 minute Input to output:	3000			V rms
MTBF	Per MIL-HDBK-217E @ 25°C	240,000			Hours
Dimensions	43.3 x 63.0 x 26.6 for case only				mm
Weight			90 3.2		g oz.
Material flamm.	UL94V-0				
EMI	Conducted emissions Radiated emissions	FCC part 15, class B FCC part 15, class B			
RoHS compliant	Yes				
Safety	UL/cUL1310				

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CUI INC

EPS045100-P7P Switching Power Supply

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AC/DC Direct Plug in Adapter

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