

EPS030100-P7P Switching Power Supply

AC/DC Direct Plug in Adapter

Page No: 1/3

# **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 manditory efficiency requirements



#### Models

	Output	Output Current		Ripple & Noise	
Model	Voltage	Minimum	Maximum	Max. Power	(mVpp) <sup>1</sup>
EPS030100-P7P	3.0 V	0 A	1.0 A	3.0 W	100 <sup>2</sup>

#### 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.

2. Ripple & Noise may be up to 200mVpp at 4%~8% of rated maximum load on these units.

## Input

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



EPS030100-P7P Switching Power Supply

**AC/DC** Direct Plug in Adapter

Page No: 2/3

# 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	-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	%/ºC
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 automatical-
	ly. 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	٥C
Storage temp.		-20	85	٥C
Operating humid.	Non-condensing	10%	90%	RH
Storage humid.	Non-condensing	10%	90%	RH
Leakage current	at 120 VAC		0.5	mA
Isolation voltage	Applied for 1 minute			
(HI-POT)	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		g
		3.2		oz.
Material flamm.	UL94V-0			
EMI	Conducted emissions	FCC part 15, class B		
	Radiated emissions	FCC part 15, class B		
RoHS compliant	Yes			
Safety	UL/cUL1310			

\*CUI Inc. reserves the right to make changes to its products or to discontinue any product or service without notice, and to advise customers to verify the most up-to-date product information before placing orders. CUI Inc. assumes no liability or responsibility for customer's applications using CUI Inc. products other than repair or replacing (at CUI's option) CUI Inc. products not meeting CUI's published specifications. Nothing will be covered outside of standard product warranty.



EPS030100-P7P Switching Power Supply

AC/DC Direct Plug in Adapter

Page No: 3/3

