

EPS030100-P7P Switching Power Supply

AC/DC Direct Plug in Adapter

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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) ¹
EPS030100-P7P	3.0 V	0 A	1.0 A	3.0 W	100 ²

Notes:

1. Ripple & Noise measured at 20 MHz BW, with a 0.1 μF ceramic cap and a 10 μF 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



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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			

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