

Desk Top Power Supplies

**POWER
SOLVE**www.powersolve.co.uk

PS100E Series 100 Watt Switch Mode PFC Universal AC Input

Features

- Universal Input Range 90-264VAC
- Active PFC Function
- Overvoltage & Short Circuit Protection
- Conductive EMI Meets CISPR/FCC Class B
- CEC Level IV Compliant
(PS100E120/150: Output cable $\leq 1200\text{mm}$)
(PS100E240/480: Output cable $\leq 1800\text{mm}$)
- Optional Output Connectors



Electrical Specification

INPUT

Input Voltage Range	90 - 264Vac
Frequency	47 - 63Hz
Inrush Current	120A max. @ 240Vac
Conducted EMI	CISPR/FCC Class B
Isolation - Input/Output	4242VDC
Leakage Current	3.5mA max.

OUTPUT

Hold-up Time	20mS typ. @ 115Vac
Short Circuit Protection	Auto Recovery
Over Voltage Protection	Recycle AC input to restart

ENVIRONMENTAL

Operating Temperature Range	0°C to +40°C
Storage Temperature Range	-20°C to +85°C
Cooling	Natural convection

GENERAL

Safety Approval	cUL/UL 60950, TUV EN60950
Dimensions	150.0 x 70.0 x 35.0 mm 5.906 x 2.756 x 1.378 inches
Weight	600g
AC Inlet	IEC320/C14

Output Voltage and Current Ratings

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE	VOLTAGE SETPOINT	LINE REG.	LOAD REG.
PS100E120	12V	8.34A	2%	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$
PS100E150	15V	6.67A	2%	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$
PS100E240	24V	4.17A	2%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$
PS100E480	48V	2.08A	2%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$

NOTE:

1. Voltage set point at 60% full load.
2. Output noise and ripple measured with 10 μ F electrolytic & 0.1 μ F ceramic capacitors across output at 20MHz BW.
3. Line regulation is measured from 100Vac to 240Vac at full load.
4. Load regulation is measured from 60% to full load and from 60% to 20% load (60% $\pm 40\%$ load).
5. Cable length limit for PS100E120/150: 1200mm max.
Cable length limit for PS100E240/480: 1800mm max.

Typical at 25°C, nominal line and 60% load unless otherwise stated.

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Mechanical Details

All dimensions in inches (mm)

Tolerances: Inches x.xxx ± 0.02

Millimeters x.xx ± 0.5

