



Power Partners

PEAD310 Series 310W Power Supply



- Class I and Class II Versions
- Efficiency Level VI
- <500mW No Load Power Consumption
- LED on Indicator
- Overload Protection
- Short Circuit Protection
- Over-temperature Protection
- No Load Operation
- 100% Burn-In/Hi-Pot Testing
- RoHS Compliant

Electrical Specifications

Input

Input Voltage	90-264VAC
Input Frequency	47-63 Hz
Input Current	5A max at 115VAC 2.5A max at 230VAC
Inrush Current	<75A peak at 115VAC, <150A peak at 230VAC, cold start, 25°C

Output

Total Output	250-310W (see table for details)
Output Voltage	See table
Hold Up Time	>10mS at full load and 115VAC nominal line
Average Active Efficiency	>87.5% with 115VAC/60Hz & 230Vac/50Hz input voltage (DOE level VI compliant)
No Load Power Consumption	<500mW
Turn on Delay	<3 seconds

Protection

Overvoltage	110%-150% of nominal. Cycle AC power to reset after fault is removed
Overload	105%-150% of maximum output current. Auto recovery
Short Circuit	Hiccup mode. Auto recovery
Over Temperature	Output latched off during fault. Cycle AC power to reset
Ingress	IP22 Compliant

Environmental & Operating

Operating Temperature	0°C to 60°C, derate linearly from 100% at 40°C to 50% at 60°C
Storage Temperature	-20°C to +85°C
Humidity	10% - 90% non-condensing
Altitude	<5000m operational and storage
MTBF:	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient

Compliance

Safety Approvals

USA	UL60950-1
Canada	cUL60950-1
	UL/cUL62368-1 (Pending)
Europe	TUV EN60950-1/A12: 2011
	CB Report
	EN62368-1 (In Process)

EMC:

	FCC Class B Radiated & Conducted
	CISPR22 Class B Radiated & Conducted
	EN55022 Class B Radiated & Conducted
	EN55024: 2010

Harmonic Currents	IEC 61000-3-2: Class A
Voltage Flicker	IEC 61000-3-3
Electrostatic Discharge	IEC 61000-4-2: 8kV Air, 6kV contact
Radiated Immunity	IEC 61000-4-3: 3V/m
EFT/Burst	IEC 61000-4-4: +/-1kV
Surge Immunity	IEC 61000-4-5: 2005 1kV diff, 2kV com
Conducted Immunity	IEC 61000-4-6: 3Vrms
Magnetic Field	IEC 61000-4-8: 1A/m
Dips / Interruptions	IEC 61000-4-11: 30% reduction for 500ms, >95% reduction for 10ms.

General

Dimensions	7.8"(198mm)L x 4"(102mm)W x 2"(51mm)H
AC Input Receptacle	IEC60320 C14, C18
DC output Plug	6-pin Molex mini-fit, #39-01-2060 with female terminals #5556. Mates with Molex plug 39-01-2066 and male terminal #5558. Other connectors available upon request.
Weight	3lb

Your Partners in Power.....

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Specifications subject to change.
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Models and Ratings Chart

Model	Voltage	Current	Total Power	Load Regulation	Line Regulation	Ripple & Noise (P-P)
PEAD310-12	12VDC	20.83A	250W	+/-5%	+/-2%	240mV
PEAD310-13	15VDC	16.66A	250W	+/-5%	+/-2%	300mV
PEAD310-13-2	19VDC	15.79A	300W	+/-5%	+/-2%	380mV
PEAD310-14	24VDC	12.50A	300W	+/-5%	+/-2%	480mV
PEAD310-17	36VDC	8.61A	310W	+/-5%	+/-2%	720mV
PEAD310-18	48VDC	6.45A	310W	+/-5%	+/-2%	840mV
PEAD310-19-1	56VDC	5.53A	310W	+/-5%	+/-2%	840mV

C14 Standard Receptacle.

For C18 Class II Receptacle, model number is PEAD310F, for example PEAD310F-12

Mechanical Outline

