

PEAD310 Power Supply Series (310W)

Features:

- IEC 60601-1-2 4th Edition EMC Compliant
- Class I and Class II Versions
- BF Rated Class II Version
- Meets Efficiency Level VI Requirements
- LED on Indicator
- Overload Protection
- Short Circuit Protection
- No Load Operation
- 100% Burn-In/Hi-Pot Testing



Description:

The PEAD310 series of AC/DC switching power supplies are for 250-310 watts of continuous output power. They are available as Class I or Class II devices with the inlet of the IEC320/C14 or C18 to mate with an interchangeable cord for world-wide use. All models meet FCC, EN55022, and CISPR22 class B emission limits, and comply with UL, IEC, DOE level VI, CE, and more.

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

NOTES:

C14 Standard Receptacle.

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

Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63 Hz
Input Current	3.5A max at 115 VAC 2.5A max at 230 VAC
Inrush Current	<70A peak at 115VAC <140A peak at 230VAC, cold start, 25°C
Safety Isolation	3.0kVAC Input to Output 1.5kVAC Input to Ground
Leakage Current	3500µA max. at 240VAC
Power Factor	>0.9
Output	
Total Output Power	220-250W See Table
Output Voltage	See Table
Hold Up Time	≥10mS typical/full load/115VAC
Average Active efficiency	>88% with 115VAC/60Hz & 230Vac/50Hz input voltage (CEC level VI compliant)
No Load Power Consumption	<210mW at 230VAC/50Hz
Turn on Delay	<3 seconds
Protection Features	
Overvoltage Protection	110%-150% Max. of nominal. Auto recovery
Overcurrent Protection	110%-150% of maximum output current. Auto recovery
Short Circuit	Hiccup mode. Auto recovery
Ingress	IP22 Compliant
Environmental	
Operating Temperature	0°C to 60°C (Derate output power linearly from 100% at 40°C to 50% at 60°C)
Storage Temperature	--20°C to +85°C
Operating Humidity	10% - 90% non-condensing
Altitude	<5000m operational and storage
General Specifications	
Dimensions	7.2"(182mm)L x 3.3"(84.5mm)W x 1.8"(46mm)H
Weight	2.2lb
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient
AC Input Receptacle	IEC60320 C14, C6, C8
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.

Specifications Continued	
Safety	
Approved to USA/Canada	UL60950-1 cUL60950-1 UL/cUL62368-1 (Pending)
Approved to Europe	TUV EN60950-1/A12: 2011 CB Report EN62368-1 (In Process)
*Consult with TT Electronics for information on additional country safety approvals	
EMC	
EMC	FCC Class B Radiated & Conducted CISPR22 Class B Radiated & Conducted EN55022 Class B Radiated & Conducted EN55024: 2010
Harmonic Currents Voltage Flicker Electrostatic Discharge Radiated Immunity EFT Surge Immunity Conducted Immunity Power Frequency Magnetic Field Immunity Dips/Interruptions	IEC 61000-3-2: Class A IEC 61000-3-3 IEC 61000-4-2: 8kV Air, 6kV contact IEC 61000-4-3: 3V/m IEC 61000-4-4: +/-1kV IEC 61000-4-5: 2005 1kV diff, 2kV com IEC 61000-4-6: 3Vrms IEC 61000-4-8: 1A/m IEC 61000-4-11: 30% reduction for 500ms,>95% reduction for 10ms