

# PEAMD310 Power Supply Series (310W)

## Features:

- IEC 60601-1-2 4th Edition EMC Compliant
- Class I and Class II Versions
- Meets Efficiency Level VI Requirements
- BF Rated Output on Class II Versions
- LED on Indicator
- Overload Protection
- Short Circuit Protection
- Over-temperature Protection
- No Load Operation



## Description:

The PEAMD310 series of AC/DC desktop power supplies provides up to 310W of continuous output power. Available in both Class I and Class II construction types, the PEAMD180 series can be ordered with a C14 or C18 AC inlet. The PEAMD310 series is 60601-1-2 4th edition EMC compliant, DoE Level VI compliant and offers a suite of built in protection features.

Model Number	Voltage	Current	Total Power	Load Regulation	Line Regulation	Ripple & Noise (P-P)
PEAMD310-12	12VDC	20.83A	250W	±5%	±2%	240mV
PEAMD310-13	15VDC	16.66A	250W	±5%	±2%	300mV
PEAMD310-13-2	19VDC	15.79A	300W	±5%	±2%	380mV
PEAMD310-14	24VDC	12.50A	300W	±5%	±2%	480mV
PEAMD310-17	36VDC	8.61A	310W	±5%	±2%	720mV
PEAMD310-18	48VDC	6.45A	310W	±5%	±2%	960mV

### NOTES:

C14 Standard Receptacle

For C8 input receptacle, model numbers are PEAMD310SF, For Example PEAMD310SF-12

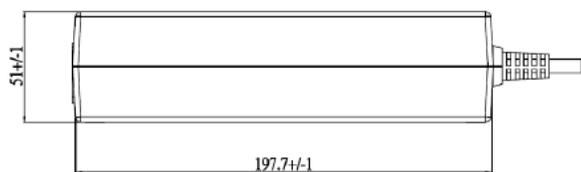
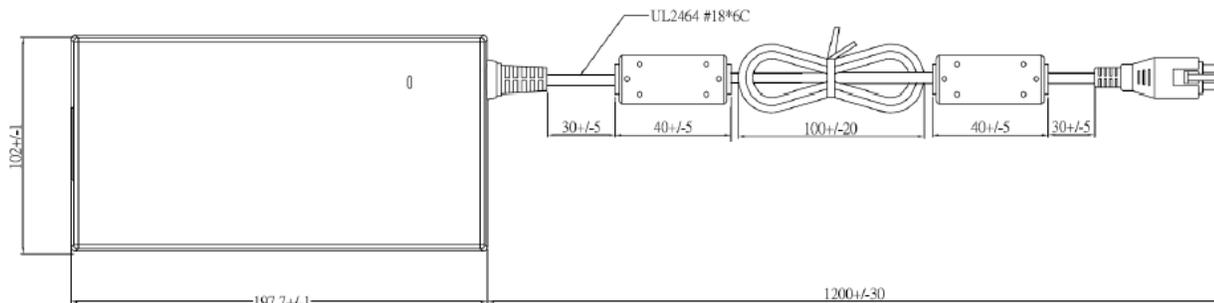
For C6 input receptacle, model numbers are PEAMD310S, For Example PEAMD310S-12

For C18 input receptacle, model numbers are PEAMD310F, For Example PEAMD310F-12

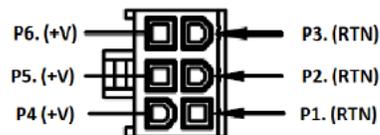
<b>Specifications</b>	
<b>Input</b>	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	5A max at 115VAC 2.5A max at 230VAC
Inrush Current	<75A peak at 115VAC; <150A peak at 230VAC, cold start, 25°C
Power Factor	>0.9
<b>Output</b>	
Total Output Power	250-310W (see table for details)
Output Voltage	See table
Hold Up Time	>10ms at full load and 115VAC nominal
Earth Leakage Current (Class I)	<110uA max. at 264VAC 60Hz
Touch Current	<100uA max. at 264VAC. 60Hz
Average Active Efficiency	>87.5% with 115VAC/60Hz & 230VAC/50Hz input voltage (Meets DOE Level VI requirements)
No Load Power Consumption	<500mW
Turn on Delay	<3 seconds
<b>Protection Features</b>	
Overvoltage Protection	110%-150% of nominal. Cycle AC power to reset after fault is removed
Overload Protection	105-150% of maximum output current. Auto Recovery
Short Circuit Protection	Hiccup Mode. Auto Recovery
Over Temperature Protection	Output disabled during fault. Cycle AC power to reset
Ingress	IP22 Compliant
<b>Environmental</b>	
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
Humidity	10% - 90% non-condensing
Altitude	<5000m operational and storage
<b>General Specifications</b>	
Dimensions	7.8"(198mm) x 4"(102mm) x 2"(51mm)
Weight	3lb
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient
AC Input Receptacle	IEC60320 C14, C18
DC output Plug	6--pin Molex mini-fit. Others available upon request

<b>Specifications Continued</b>	
<b>Safety</b>	
Approved to USA/Canada	ANSI/AAMI ES60601-1 cUL ES60601-1
Approved to Europe	TUV EN60601-1 3rd edition
Isolation	CB Report 4000VAC input to output, 2 x MOPP 1500 VAC input to ground, 1 x MOPP
*Consult with TT Electronics for information on additional country safety approvals	
<b>EMC</b>	
EMC (IEC60601-1-2:2014)	FCC Class B Radiated & Conducted CISPR11 Class B Radiated & Conducted EN55011 Class B Radiated & Conducted
Harmonic Currents Voltage Flicker Electrostatic Discharge Radiated Immunity EFT/Burst Surge Immunity Conducted Immunity Magnetic Field Dips/Interruptions	IEC 61000-3-2 IEC 61000-3-3 IEC 61000-4-2: ±15kV Air, ±8kV contact IEC 61000-4-3: 10V/m IEC 61000-4-4: ±2kV IEC 61000-4-5: 1kV diff, 2kV com IEC 61000-4-6: 10Vrms IEC 61000-4-8: 30A/m IEC 61000-4-11: Voltage dip immunity, 30% reduction for 500ms, 100% reduction for 10ms

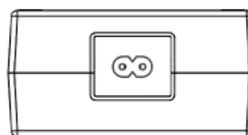
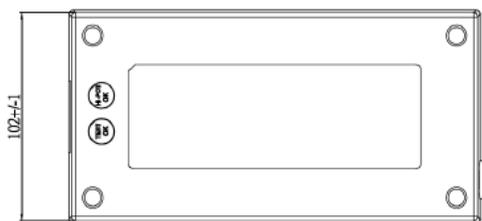
## Diagrams



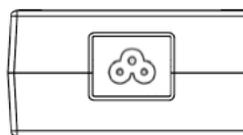
### Connector Pin-Outs



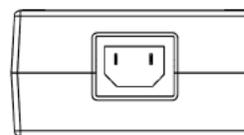
Output Return Connected to Earth Ground on Class I Models.



C8



C6



C18

### Thermal Derating Curve

