

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

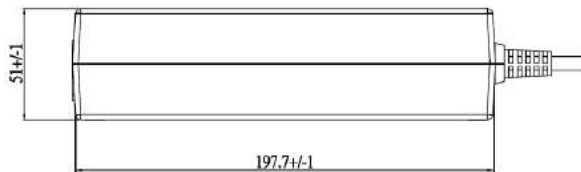
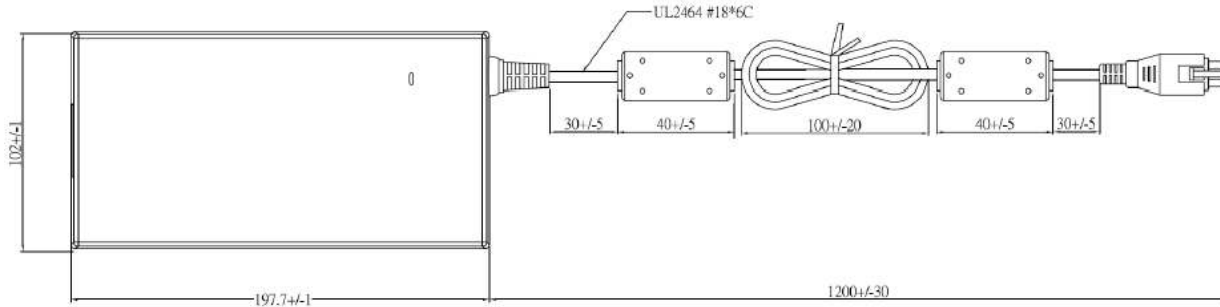
For C6 input receptacle, model numbers are PEAMD310S, For Example PEAMD310S-12

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

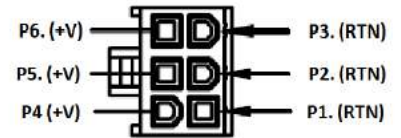
| Specifications | |
|---------------------------------|--|
| Input | |
| Input Voltage | 90-264VAC |
| Input Frequency | 47-63Hz |
| Input Current | 5A max at 115VAC 2.5A max at 230VAC |
| Inrush Current | <75A peak at 115VAC; <150A peak at 230VAC, cold start, 25°C |
| Power Factor | >0.9 |
| Output | |
| 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 |
| Protection Features | |
| 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 |
| 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 |
| Humidity | 10% - 90% non-condensing |
| Altitude | <5000m operational and storage |
| General Specifications | |
| 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 |

| Specifications Continued | |
|---|---|
| Safety | |
| 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 | |
| EMC | |
| 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 |

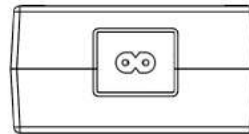
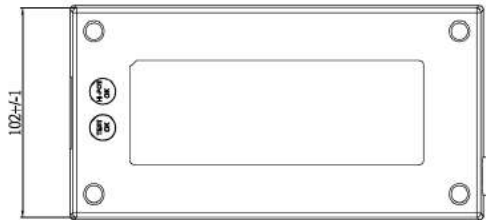
Diagrams



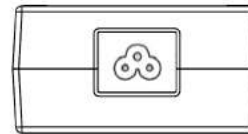
Connector Pin-Outs



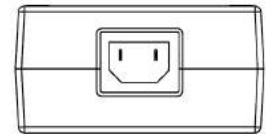
Output Return Connected to Earth Ground on Class I Models.



C8



C6



C18

Thermal Derating Curve

