

# PEAMW12NA Power Supply Series (12W)

**Features:**

- Class II Configuration
- Efficiency Level VI
- Optional USB (5V only) or Cable Output
- Short Circuit Protection
- Overload Protection
- No Load Operation



**Description:**

The PEAMW12NA series of AC/DC wall mount switching power supplies provide 12 watts of continuous power. They are Class II devices with fixed North American AC plugs and can be provided with a USB output connector. All models meet FCC and EN55011 class B emission limits, and comply with UL, IEC, CE, and more.

| Model Number      | Voltage | Current | Total Power | Output Regulation | Ripple & Noise (P-P) | Efficiency Level |
|-------------------|---------|---------|-------------|-------------------|----------------------|------------------|
| PEAMW12NA-10-B1   | 5VDC    | 2.4A    | 12W         | ±5%               | 100mV                | VI               |
| PEAMW12NA-10-USB  | 5VDC    | 2.4A    | 12W         | ±5%               | 100mV                | VI               |
| PEAMW12NA-11-B1   | 9VDC    | 1.33A   | 12W         | ±5%               | 180mV                | VI               |
| PEAMW12NA-12-B1   | 12VDC   | 1A      | 12W         | ±5%               | 250mV                | VI               |
| PEAMW12NA-13-B1   | 15VDC   | 0.8A    | 12W         | ±5%               | 250mV                | VI               |
| PEAMW12NA-13-1-B1 | 18VDC   | 0.67A   | 12W         | ±5%               | 250mV                | VI               |
| PEAMW12NA-14-B1   | 24VDC   | 0.5A    | 12W         | ±5%               | 350mV                | VI               |

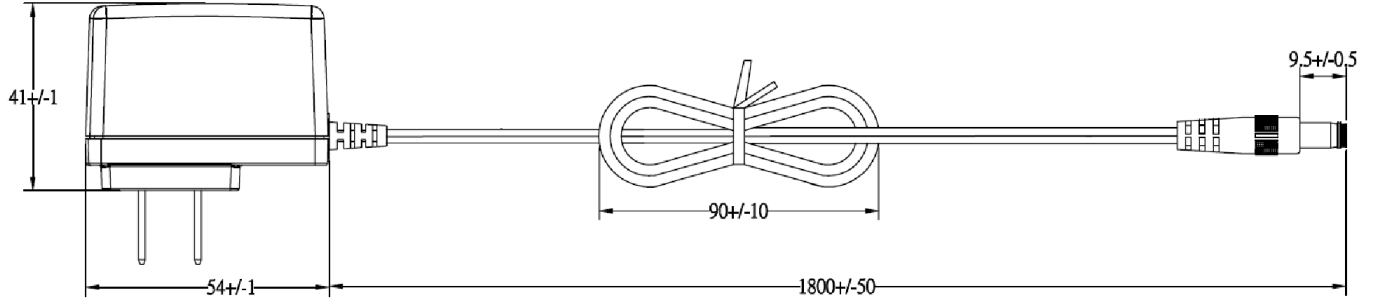
**NOTES:**

- Ripple & Noise is measured using a 20MHz bandwidth oscilloscope with a 0.1uf ceramic capacitor and 4.7uf electrolytic capacitor in parallel across the output at full load and nominal line voltage.
- PEAMW12NA-10-USB has a standard USB A output port. All other models have a 4ft cable terminated with a 5.5 x 2.1mm barrel connector. Consult PPI for custom connectors.

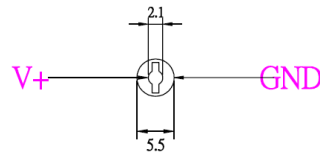
| <b>Specifications</b>         |  |
|-------------------------------|--|
| <b>Input</b>                  |  |
| Input Voltage                 | 90-264 VAC   |
| Input Frequency               | 47-63Hz  |
| Input Current                 | <0.6A, 115VAC– 230 VAC   |
| Safety Isolation              | 3.0k VAC Input to Output   |
| Inrush Current                | <30A peak @ 115 VAC, cold start at 25°C<br><60A peak @ 230 VAC, cold start at 25°C                               |
| No Load Power                 | <100mW   |
| <b>Output</b>                 |  |
| Total Output                  | 12W  |
| Output Voltage                | See table  |
| Hold Up Time                  | >8.3m sec @ full load and 115VAC/60Hz input  |
| Turn on Time                  | <3 seconds   |
| Efficiency                    | DOE level VI Compliant   |
| Minimum Load                  | No Minimum Load  |
| Line Regulation               | <± 1% of rated output voltage at full load   |
| <b>Protection Features</b>    |  |
| Overvoltage Protection        | 150% Max. of rated voltage. Latching mode. Cycle AC for recovery   |
| Overcurrent Protection        | 150% Max. of rated current. Auto-restart when fault removed.   |
| Short Circuit Protection      | Hiccup Mode. Auto Recovery   |
| 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   |
| Operating Humidity            | 10% - 90% non-condensing   |
| Storage Humidity              | 5% - 90% non-condensing  |
| Operating Altitude            | <5000m   |
| <b>General Specifications</b> |  |
| Dimensions                    | 2.12"(54mm)L x 1.61"(41mm)W x 0.94"(24mm)H   |
| Weight                        | 0.3 pounds   |
| MTBF                          | >100,000 hours per MIL-HDBK-217F at full load and 25°C ambient   |
| AC Input Receptacle           | Fixed North American Plug  |
| DC output Plug                | Barrel Type: 5.5mm x 2.1mm x 9.5mm<br>Center positive (others upon request)<br>Optional USB output for 5V models |

| <b>Specifications Continued</b>   |  |
|---|--|
| <b>Safety</b>   |  |
| Approved to USA/Canada  | ANSI/AAMI ES60601-1<br>cUL ES60601-1                                     |
| Approved to Europe  | TUV EN60601-1<br>CB Report<br>CE Mark                                    |
| *Consult with TT Electronics for information on additional country safety approvals |  |
| <b>EMC</b>  |  |
| EMC   | FCC Class B Radiated & Conducted<br>EN55011 Class B Radiated & Conducted |
| Harmonic Currents   | IEC 61000-3-2  |
| 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.        |

Diagrams



Output Connector



Thermal Derating Curve

