

VEP08 Series



- Energy Star Level V
- CEC2008 & EISA 2007 Compliant
- Medical & ITE Approvals
- Interchangeable Input Connectors
- Class II Construction
- Low Cost
- Output Voltages from 5.0 V to 18.0 V Available

Specification

Input

| | |
|---------------------|------------------------------------|
| Input Voltage | • 90-264 VAC |
| Input Frequency | • 47-63 Hz |
| Input Current | • 0.3 A max at 90 VAC |
| Inrush Current | • 50 A max at 230 VAC |
| Power Factor | • Conforms to EN61000-3-2, class A |
| No Load Input Power | • <0.3 W |

Output

| | |
|--------------------------|--|
| Output Voltage | • See table |
| Initial Set Accuracy | • $\pm 5\%$ at 50% load |
| Minimum Load | • No minimum load required |
| Start Up Delay | • 2 s max |
| Start Up Rise Time | • 100 ms typical |
| Hold Up Time | • 5 ms typical at full load and 115 VAC |
| Line Regulation | • $\pm 0.5\%$ max |
| Load Regulation | • $\pm 5\%$ max |
| Transient Response | • 4% max. deviation, recovery to <1% within 500 μ s for a 50% step load change at 0.2 A/ μ s |
| Ripple & Noise | • See table |
| Overvoltage Protection | • See table |
| Overload Protection | • 120-280%, auto recovery |
| Short Circuit Protection | • Trip and restart (Hiccup mode) |
| Temperature Coefficient | • 0.2 %/ $^{\circ}$ C |

General

| | |
|---------------------|-------------------------------|
| Efficiency | • 75% min, see note 4 |
| Isolation | • 4000 VAC Input to Output |
| Switching Frequency | • 132 kHz typical |
| MTBF | • >250 kHrs per MIL-HDBK-217F |

Environmental

| | |
|-----------------------|--|
| Operating Temperature | • 0 $^{\circ}$ C to +40 $^{\circ}$ C |
| Cooling | • Natural convection |
| Operating Humidity | • 5-95% RH, non-condensing |
| Storage Temperature | • -20 $^{\circ}$ C to +60 $^{\circ}$ C |
| Shock | • Able to survive 1m drop onto concrete on each of 6 axes |
| Vibration | • 10-300 Hz, 1 g 15 mins/sweep. 30 mins for each of 3 axes |

EMC & Safety

| | |
|----------------------|--|
| Emissions | • EN55022, level B conducted & radiated |
| Harmonic Currents | • EN61000-3-2, class A |
| Voltage Flicker | • EN61000-3-3 |
| ESD Immunity | • EN61000-4-2, ± 4 kV contact, ± 8 kV air, Perf Criteria A |
| Radiated Immunity | • EN61000-4-3, 3 V/m, Perf Criteria A |
| EFT/Burst | • EN61000-4-4, level 2, Perf Criteria A |
| Surge | • EN61000-4-5, level 3, Perf Criteria A |
| Conducted Immunity | • EN61000-4-6, 3 V, Perf Criteria A |
| Magnetic Field | • EN61000-4-8, 1 A/m, Perf Criteria A |
| Dips & Interruptions | • EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B |
| Safety Approvals | • EN60950, cUL60950, IEC60950, EN60601-1, cUL60601-1, IEC60601-1 |

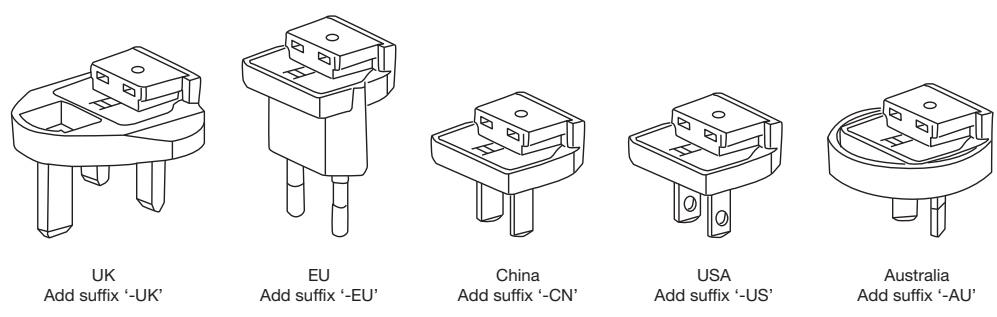
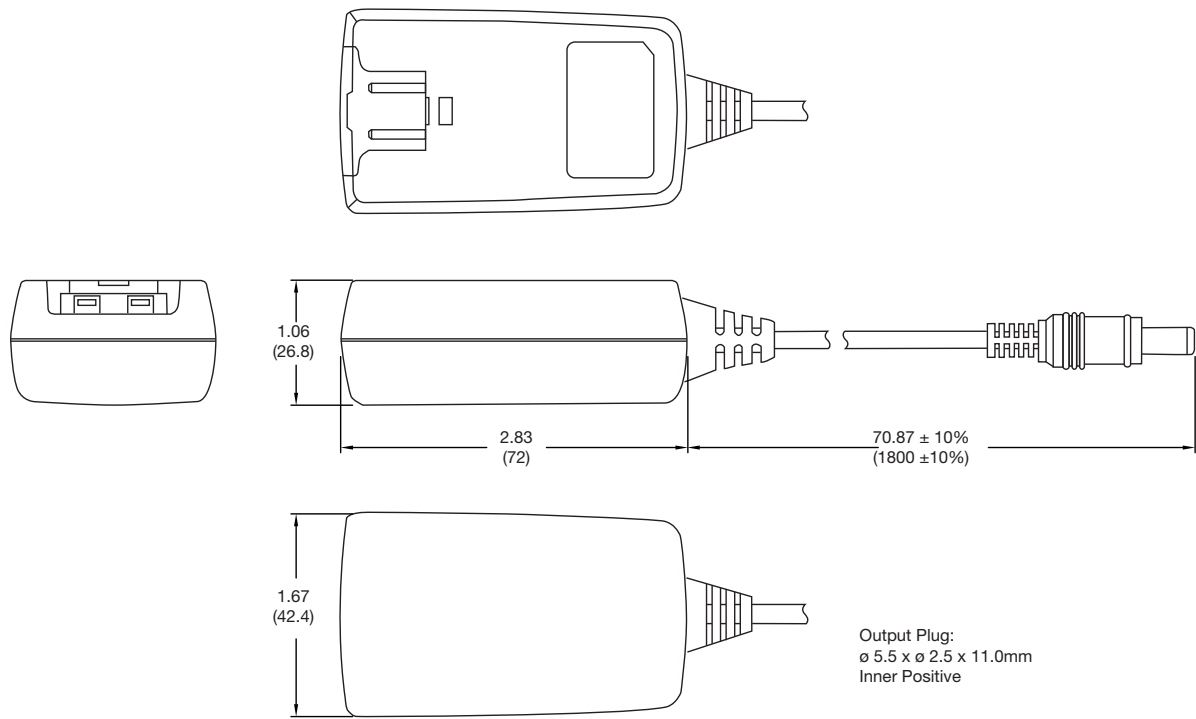
Models and Ratings

| Output Power | Output Voltage ⁽²⁾ | Output Current | Ripple & Noise ⁽¹⁾ | Overvoltage Trip ⁽⁵⁾ | Model Number ⁽³⁾ |
|--------------|-------------------------------|----------------|-------------------------------|---------------------------------|-----------------------------|
| 8 W | 5 V | 1.6 A | 150 mV | 10 V | VEP08US05 |
| 8 W | 9 V | 0.88 A | 200 mV | 18 V | VEP08US09 |
| 8 W | 12 V | 0.66 A | 200 mV | 20 V | VEP08US12 |
| 8 W | 15 V | 0.53 A | 200 mV | 25 V | VEP08US15 |

Notes

1. Measured at end of DC output lead using 20 MHz band width and 0.1 μF ceramic capacitor in parallel with 10 μF electrolytic capacitor placed at connector terminals.
2. Other voltages between 3.0 V and 18.0 V are available on request, consult sales for details.
3. A suffix denoting the type of mains plug required must be added to the part number. See below.
4. Efficiency given is the average of efficiencies measured with output loads of 25%, 50%, 75% and 100%.
5. Typical trip point.

Mechanical Details



Notes

1. All measurements are in inches (mm). Tolerance is ±0.04 (±1) maximum, except output cable length.
2. Weight 80g approx.
3. Case material is PC Class 94 V-0
4. Output Lead: UL2468 18-24 AWG
5. Mains plugs can be ordered separately. Part numbers are: VEP PLUG UK, VEP PLUG EU, VEP PLUG CN, VEP PLUG US or VEP PLUG AU

