

# CENB1100

Universal Input 100 Watt Series



ITE Switch-Mode Power Supply

3 Year Warranty

- 100-240VAC Universal Input
- Meets EISA2007, CEC Efficiency Level V, EU (EC) No 278/2009 Phase II
- Desktop Style
- 12V to 48V Single Output Models, up to 100W
- Modified and Custom Designs Available
- Regulated Output with Low Ripple
- Impact-Resistant Polycarbonate Enclosure
- No Load Power Consumption <0.5W
- Meets UL/EN/IEC60950-1, 2<sup>nd</sup> Edition



## Specifications

All Specifications are typical at nominal input, full load at 25°C unless otherwise stated.

|                      |  |                          |  |
|----------------------|--|--------------------------|--|
| AC Input             | 100-240Vac, +/-10%, 47-63 Hz, 1Ø                   | MTBF                     | 100,000 hours calculated   |
| Input Current        | 100 Vac: 2.2 A                                     | Hold-up Time             | 18 ms min. @ 115Vac, 60 ms min. @ 230 Vac  |
| Inrush Current       | 60A peak @ 264Vac, cold start                      | Overload Protection      | Hiccup Mode  |
| Input Fuse           | 3.15A, 250V Internal Primary Current Fuse provided | Short Circuit Protection | Hiccup Mode  |
| Efficiency           | Meets International Efficiency Level V             | Topology                 | Switching – Fixed Frequency Flyback  |
| Output Voltage       | See chart  | Safety and EMC Approvals | EN/IEC/CSA/UL60950-1, 2 <sup>nd</sup> Edition<br>EMC: See chart                          |
| Output Power         | See chart  | Dielectric Withstand     | Input-Output: 4,242Vdc<br>Input-GND: 1,500Vac, Output-GND: 500Vdc                        |
| Ripple and Noise     | 1% pk-pk max., 20MHz BW                            | Operating Temperature    | 0° to 40°C, no derating  |
| Line/Load Regulation | Excluding Cord: Line: +/- 1%, Load: +/-5%          | Storage Temperature      | -30 to +85°C   |
| Transient Response   | 500µs max., 50% load step, typical                 | Relative Humidity        | 5% to 95%, non-condensing  |
| Minimum Load         | Not required                                       | Altitude                 | 0 to 10,000 ft   |
| Case Material        | Black 94V0 Polycarbonate                           | Output Connections       | Cable: 18AWG, 1,500mm, 4 conductor<br>Connector: Ault #3, 2.5mm or Ault #51, 6-pin Molex |
| Case Dimensions      | 150mm x 87mm x 47mm, see mechanical drawing        | Weight                   | 700g   |

## EMI/EMC Compliance

|   |   |
|---|---|
| Conducted Emissions                     | FCC Part 15, Class B, EN55022 Class B, EN55024                      |
| Radiated Emissions                      | FCC Part 15, Class B, EN55022 Class B, EN55024                      |
| Voltage Fluctuations                    | EN61000-3-3, Line Flicker   |
| Static Discharge Immunity               | EN61000-4-2, 6kV Contact Discharge, 8kV air discharge               |
| Radiated RF Immunity                    | EN61000-4-3, 3V/m.  |
| EFT/Burst Immunity                      | EN61000-4-4, 2kV/5kHz..   |
| Line Surge Immunity                     | EN61000-4-5, 1kV differential, 2kV common-mode                      |
| Conducted RF Immunity                   | EN61000-4-6, 3Vrms  |
| Power Frequency Magnetic Field Immunity | EN61000-4-8, 3A/m   |
| Voltage Dip Immunity                    | EN61000-4-11 crit. A, 100Vac 60Hz, 40%/5 cycles with 70% full load. |
| Line Frequency Harmonics                | EN61000-3-2, Class A  |

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| Model Number     | Volts (V) | Output Current (max) | Max Watts | Ripple (Vp-p max) |
|------------------|-----------|----------------------|-----------|-------------------|
| CENB1100A1251F01 | 12 V      | 7.5 A                | 90 W      | 120mV             |
| CENB1100A1551F01 | 15 V      | 6.4 A                | 96 W      | 150mV             |
| CENB1100A1803F01 | 18 V      | 5.6 A                | 101 W     | 180mV             |
| CENB1100A2403F01 | 24 V      | 4.2 A                | 101 W     | 240mV             |
| CENB1100A4803F01 | 48 V      | 2.1 A                | 101 W     | 480mV             |

### Model Number Key

**CENB 1 100 A VV 03 F 01**

- Model:** "01" = Standard. "02" and higher indicates a modified model.
- Input Connector:** "F" = IEC320 C14 grounded, Other options available, see below
- Output Connector:** "03" = 2.5mm Barrel Type Connector. "51" = Molex 39-01-2060 or equiv. Other options
- Output Voltage:** "05" = 5Vdc, "12" = 12Vdc, "24" = 24Vdc, etc.
- Model:** "A" = Original Configuration
- Output Power:** "100" = 100 Watts
- # of Outputs:** "1" = Single Output
- Product Family:** "C" = Commercial/ITE/Industrial, "E" = External, "NB" = Model Series Designator

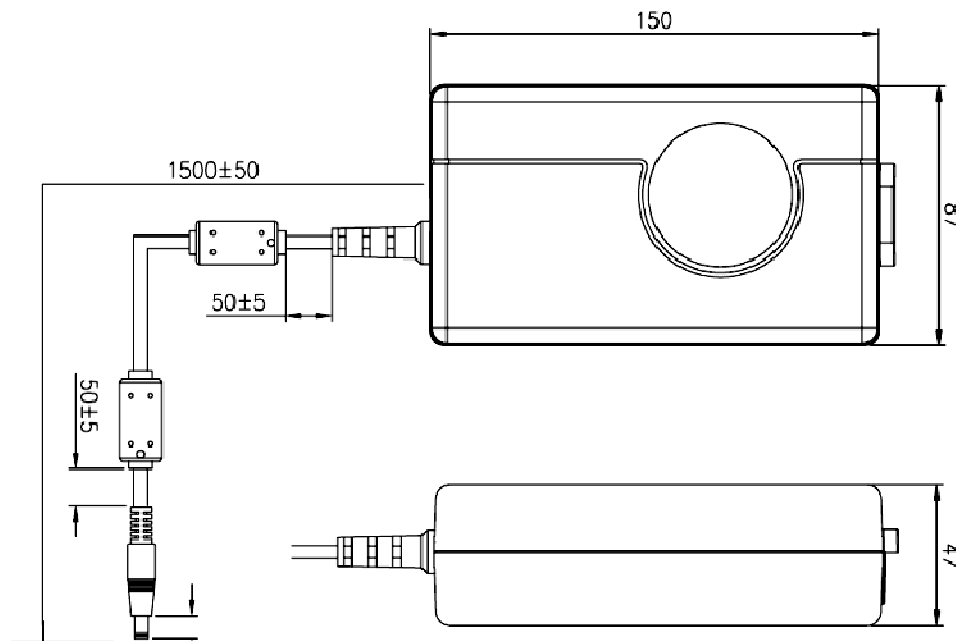
| Input Receptacle                         | Output Connector | Output Connector (12V & 15V models) |
|--|------------------|-------------------------------------|
| <p>IEC320 C14 - Class I Grounded (F)</p> | <p>3</p>         | <p>51</p>                           |

"#3" Connector is 2.5mm barrel type, center (+)

"#51" Connector is Molex 39-01-2060 or equivalent.

"51" Connector Pinout: Pins 1, 4: (+), Pins 4, 6: (-). Mate = Molex 39-01-2061 or equiv.

### Outline Drawing



Dimensions are in mm. "#3" Connector shown.