

DESCRIPTION

UNIPOWER's **SSD3000** is a new generation of high density hot-swap Front-Ends for Networking and DataCom applications that utilize the 12V Bus Architecture. With a high power density and efficiency of 85% (minimum), these "GREEN" power solutions help system designers satisfy increasing demands for reduced energy consumption, smaller size and reduced costs.

These 280 Watt Power Modules feature communication for status and control of each power module with front panel LED indicators to communicate status or fault conditions. N+1 Redundant operation is achieved with active load sharing and ORing protection circuits.

FEATURES

- ◆ 85% Efficiency (minimum)
- ◆ 1U High: 1.57"
- ◆ 0°C to +40°C Operation (Full Load)
- ◆ Universal AC Input
- ◆ >0.95 Power Factor (minimum)
- ◆ Output Voltages: 12VDC, -12V & 5VSB
- ◆ Power Density to >10W/in³
- ◆ Hot Swappable
- ◆ Integral Active Output ORing Circuit
- ◆ Class B EMI Filter
- ◆ LED Indicators
- ◆ Variable Speed Cooling Fans

TWO-YEAR WARRANTY

INTERNATIONAL STANDARDS

UL/cUL 60950-1, TUV EN 60950-1
CB IEC 60950-1, WEEE, CE Mark (LVD)



12V FRONT END MODULE

| POWER | +12V _{OUT} | -12V _{OUT} | 5V _{SB} | MODEL NO. |
|-------|---------------------|---------------------|------------------|-----------|
| 280W | 22A | 0.5A | 2A | SSD3000 |

* Total power May Not Exceed 280 Watts

SPECIFICATIONS

Typical at Nominal Line, Full Load and 25°C Unless Otherwise Noted.

INPUT

| | |
|--------------------------------|--|
| Voltage Range | 90-264 VAC |
| Power Factor | >0.95 |
| Total Harmonic Distortion, Max | 5% |
| Frequency | 47-63Hz |
| Inrush Current Limiting, Max | 35 / 70A Peak @ 115 / 230 VAC |
| EMI Filter, Conducted | FCC20780 pt 15J Curve B EN55022 Curve B |
| Fast Transients | EN61000-4-4 |
| Surges | EN61000-4-5 |
| Remote Sense Compensation | >250mV |
| Input Protection | Internal Fuse, 6.3A |

OUTPUT

| | |
|-----------------------------------|-------------------------|
| Current & Voltage | See Table |
| Output Power | 280W |
| Ripple / Noise, max | 12V = 120mV 5V = 60mV |
| Line Regulation | Max ±1% |
| Load Regulation | Max ±5% |
| Transient Load / Slew Rate | 0.5/Aµs |
| Holdup Time | 17msec @ 70% load |
| Overvoltage Protection (12V Only) | 14.5V Max (Latch Off) |
| Current Limit | >130% (Latch Off) |
| Efficiency | 85% (Minimum) |

SAFETY STANDARDS UL60950-1, CSA22.2 No. 60950-1, EN60950-1

PMBus Version Compliance 1.1

STATUS INDICATORS

| | |
|-----------------------------|--------------------------|
| Normal (AC OK) | Green |
| Standby (Only +5VSB output) | (AC OK) Blinking Green |
| Power Fail | Red |
| Fan Fail | Blinking Red |
| Audible Buzzer | Fan / Power / AC Failure |

ALARM SIGNALS (open drain, TTL compatible)

| | |
|-----------|-----------------------------------|
| PSON | Remote ON Off (LOW=ON) |
| PSKILL | Activates PSU (Short) |
| SMB ALERT | Power Fail (normal = high) |
| P GOOD | Power Good (HIGH) |
| PRESENT | Indicates Power Module is present |

ENVIRONMENTAL

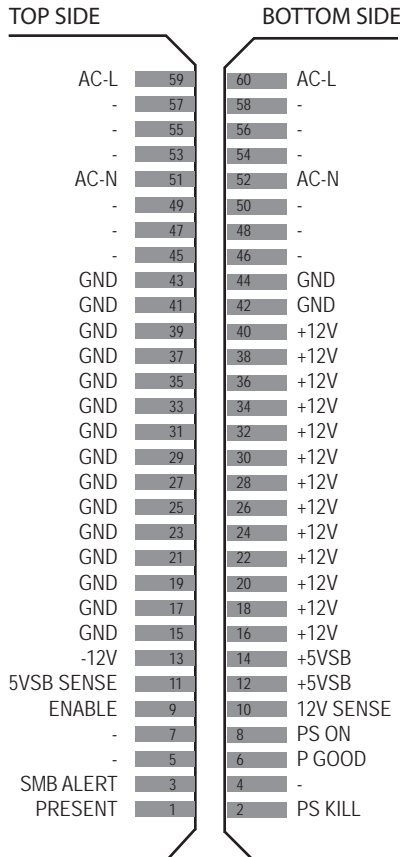
| | |
|-------------------------|--|
| Operating Temp. Range | 0°C to +40°C Full Load |
| Output Current Derating | 2.5%/°C from 40-50°C, then 5%/°C from 50-60°C |
| Storage Temp. Range | -40°C to +70°C |
| Humidity | 20-90%, Non-Condensing |
| ESD | Bellcore GR-1089-Core and EN61000-4-2 |
| MTBF, 25°C (MIL217F) | 100,000 Hours |
| Cooling | Integral Ball Bearing Fans |

PHYSICAL SPECIFICATIONS

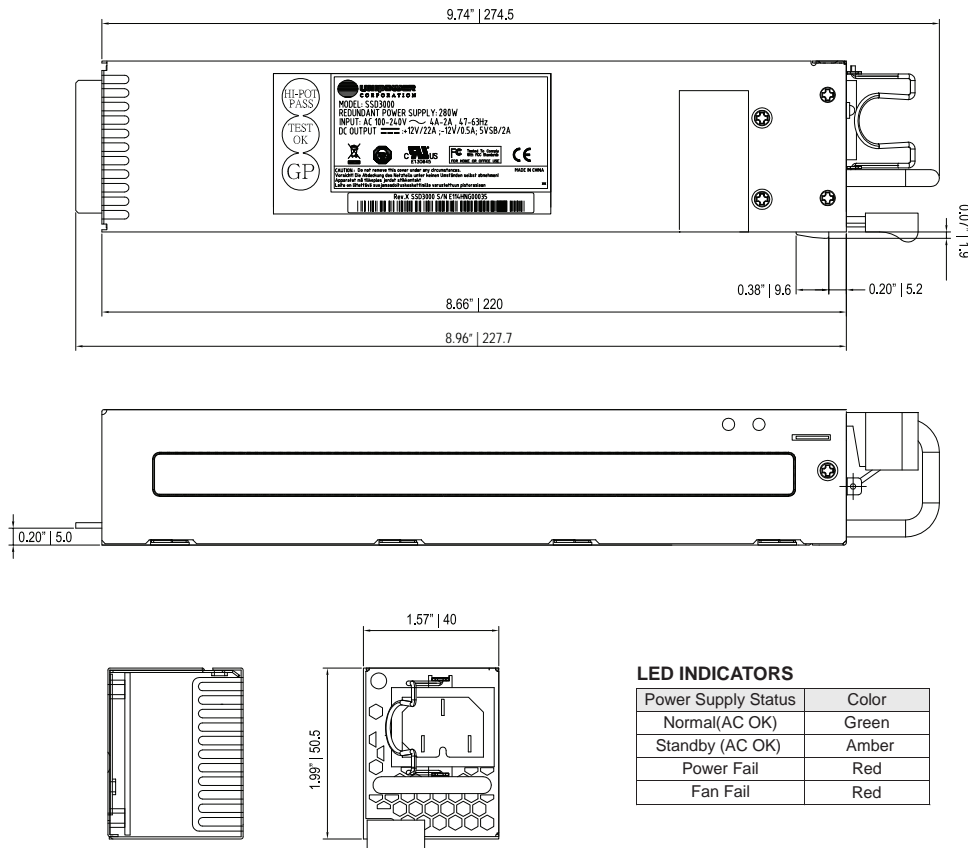
| | |
|------------------------------|---|
| Case Material | Steel |
| Case Dimensions, Inches (mm) | 8.66"(L) x 1.99"(W) x 1.57"(H) (220 x 50.5 x 40mm) |
| Weight | 2.4 lbs. (1.1 kg.) |

DC CONNECTOR DETAILS

1.27mm pitch card edge connector or equivalent



OUTLINE DRAWING



LED INDICATORS

| Power Supply Status | Color |
|---------------------|-------|
| Normal (AC OK) | Green |
| Standby (AC OK) | Amber |
| Power Fail | Red |
| Fan Fail | Red |

Unit: inches | mm