

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	0.5A/μs
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)

PS ON	Remote ON Off (LOW=ON)
PS KILL	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

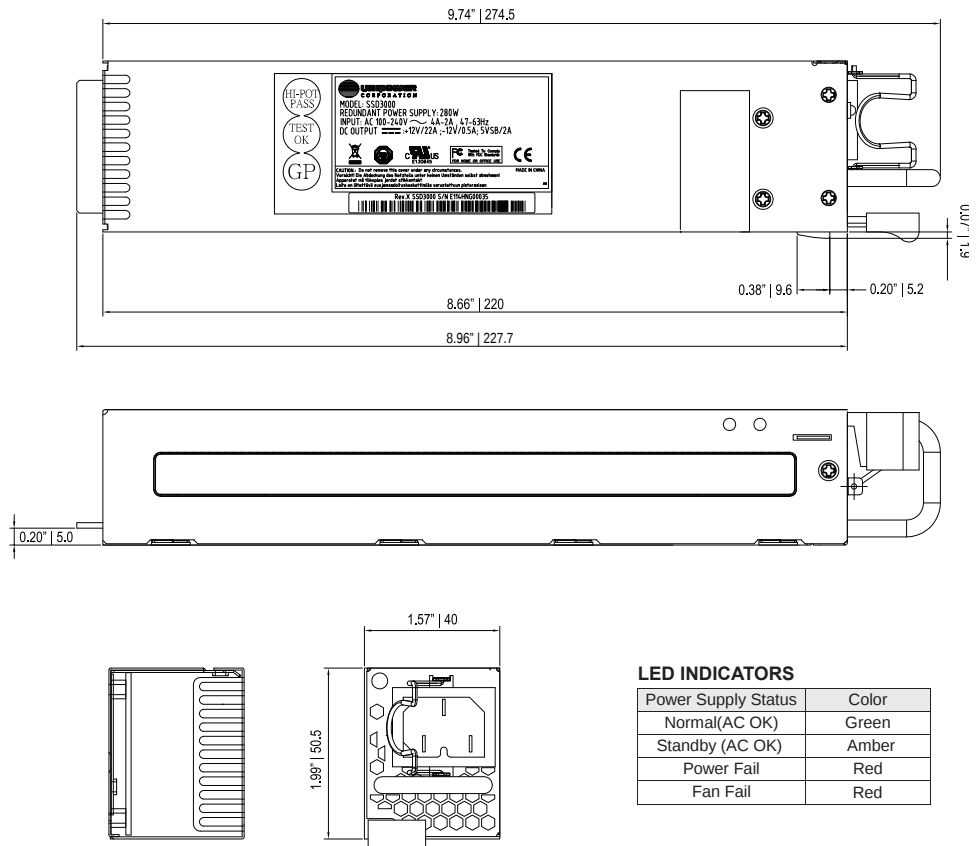
Case Material	Steel
Case Dimensions, Inches (mm)	8.66"(L) x 1.99"(W) x 1.57"(H) (220 x 50.5 x 40mm)
Weight	2.4 lbs. (1.1 kg.)

DC CONNECTOR DETAILS

1.27mm pitch card edge connector or equivalent

TOP SIDE		BOTTOM SIDE
AC-L	59	60 AC-L
-	57	58 -
-	55	56 -
-	53	54 -
AC-N	51	52 AC-N
-	49	50 -
-	47	48 -
-	45	46 -
GND	43	44 GND
GND	41	42 GND
GND	39	40 +12V
GND	37	38 +12V
GND	35	36 +12V
GND	33	34 +12V
GND	31	32 +12V
GND	29	30 +12V
GND	27	28 +12V
GND	25	26 +12V
GND	23	24 +12V
GND	21	22 +12V
GND	19	20 +12V
GND	17	18 +12V
GND	15	16 +12V
-12V	13	14 +5VSB
5VSB SENSE	11	12 +5VSB
ENABLE	9	10 12V SENSE
-	7	8 PS ON
-	5	6 P GOOD
SMB ALERT	3	4 -
PRESENT	1	2 PS KILL

OUTLINE DRAWING



LED INDICATORS

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