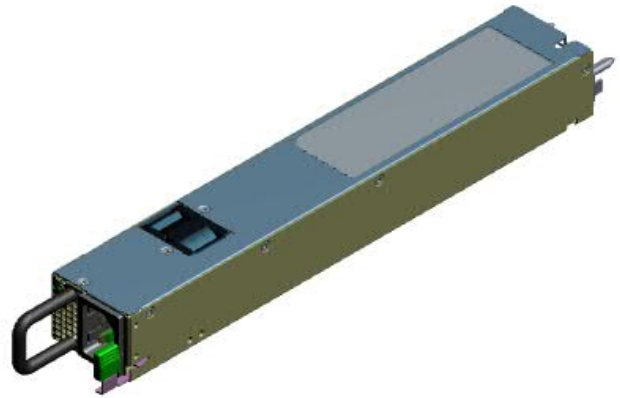


# LITEON Server Power Supply 2400W

## Features:

- 80 PLUS® Titanium
- Holdup Time:  $\geq 10\text{ms}$
- AC Input Range 90Vac ~ 264Vac
- DC Input Range 192Vdc ~ 310Vdc
- Output Voltage 12V (main) and 3.3V (stand-by)
- N+N (N=3 max) Redundant power supply with Hot plug, current sharing
- Self-cooling with fan speed control / Two Bi-color LED indicators
- PMBus Compliant 1.2
- Protection include OCP, OVP, UVP, OTP and Brownout
- 2400W is in 54.5mm (W) x40.0mm (H) x 321.5mm (L)
- Altitude: 3,000 meters
- Operating Temperature: 0°C ~ 45°C
- Compliance EMC IEC/EN 61000
- EMI Class A, -6dB Margin
- Safety Certificates: IEC/EN 60950-1, IEC62368-2



Electrical Specifications			
Parameter	Description	Parameter	Description
Input Voltage	AC input 90Vac ~ 264Vac DC input 192Vdc ~ 310Vdc	Main Output Voltage (12VDC)	12Vdc $\pm$ 5%
		ST Output Voltage	3.3Vdc $\pm$ 5%
iTHD	50% load < 8%	12VDC Current Rating	83.00A @100-110Vac 91.60A @110-127Vac 166.7A @200-210Vac 183.0A @210-220Vac 200.0A @220-240Vac
Power Factor	> 0.98 @ 50% load	Capacitive Load	12V: 2,200uF ~ 30,000uF 3.3VSB: 220uF~1000uF
		SB Current Rating	3A
Efficiency	80 PLUS® Titanium 50% load: 96%@230Vac	Power Rating	2400W@230Vac & 240Vdc; 1100W@115Vac;
Redundant	N+N Redundant, N=3 maximum	Hold Up Time	10ms

## LITEON Server Power Supply 2400W

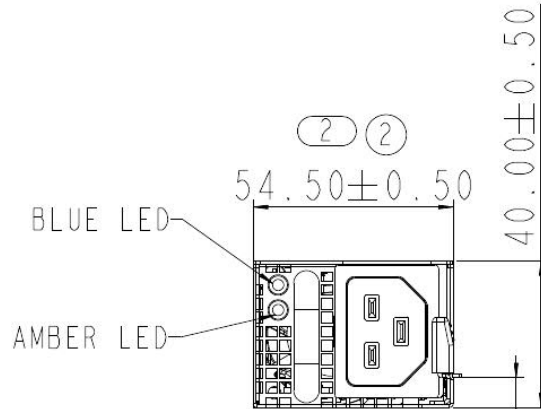
Protection			
Parameter	Description	Parameter	Description
12VDC OCP	OCP1 110% - 130%, >100mS OCP2 131% - 150%, >20mS (Latch Mode)	SB OCP	4.25A~6.5A (Latch Mode)
12VDC OVP	Voltage is above 13.3V~14.8V (Latch Mode)	SB OVP	Voltage is above 3.6V~4.5V (Latch Mode)
12VDC UVP	Voltage is below 10V ~ 11V (Latch Mode)	Over Temperature	Ambient temperature and hot spot temperature (Auto recovery mode)
Input Brownout	Voltage is below 82Vac @ Low line Voltage is below 165Vac @ High line (Auto recovery mode)	Input OVP	Voltage is above 305Vac (Auto recovery mode)

Control Signal / Indicate Signal / LED			
Parameter	Description	Parameter	Description
PSON_L	Input signal PSON_L = LOW to turn on 12VDC	PMBus	Version 1.2 I2C interface with 100KHz
PWOK_H	Output signal PWOK_H = High to indicate the 12VDC existence	LED	1Hz Blink Blue --> AC present / Only 3.3VSB
			Amber Solid --> Fault protection and Warming events
			Green Solid --> 12VDC active mode
ACOK_H	Output signal ACOK_H = High to indicate Input existence	ALERT_L	Output signal ALERT_L = LOW to indicate WARNING event (Event Programmable)
A0/A1/A2	Input signal PMBUS address	Present_L	Output signal Present_L connects to ground in power supply.
PSKILL	Input signal Accepts a ground input from the system. Pull-up to 3.3VSB located in the supply.	SDA/SCL	I2C signal line

## LITEON Server Power Supply 2400W

### AC Inlet Socket

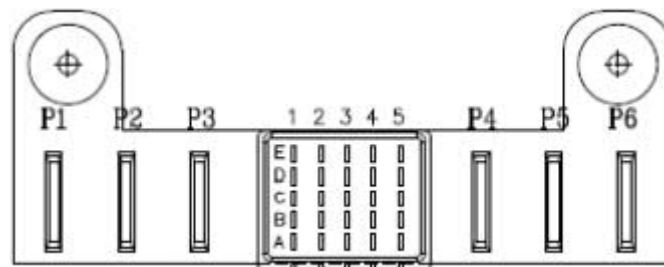
Connector Type: C22



### Output Connector and Pin Assignment

Output Connector:

PS Side: Molex 46437-2696 or equivalent part



Pin Assignment:

Power Blades					
P1~P3	+12V				
P4~P6	GND				
Signal Pins					
	1	2	3	4	5
E	3.3VSB	SCL	SMART_ON	A1	NA
D	3.3VSB	SDA	ISHARE	INOK	V12_SENSE
C	3.3VSB	PRESENT	A0	NA	V12_SENSE_RTN
B	3.3VSB	SGND	PSKILL	NA	A2
A	3.3VSB	SGND	PWOK	PSON	ALERT

# LITEON Server Power Supply 2400W

Environment / Reliability			
Parameter	Description	Parameter	Description
Operation Temp.	0°C ~ 45°C	MTBF	300K hours at rated 60% load 230Vac input, 40°C ambient. temp.
Operating Humidity	5% ~ 90%	ECAP Life	>8years Vin:115/230Vac 60%Loading 45C Vin115/230Vac 80%Loading 40C >43800 (5years) Vin:100/200Vac 60%Loading 45C Vin1100/200Vac 80%Loading 40C
Storage Temp.	-40°C ~ 80°C	Air Flow	Normal Mode, From DC to AC
Storage Humidity	5% ~ 95%	Fan Life	5 Years at 80% rated load, 40°C ambient. temp.
Operating Altitude	5000 meters		

Safety Approvals IEC/EN 60950-1, IEC/EN62368-1 and UL/CSA62368-1 2nd Ed.		
Insulation safety rating	Input / Output	Reinforce
	Input / Case	Basic
	Output / Case	Functional
Hi-pot strength	Input / Output	1800 Vac or 2500Vdc /1min leakage current< 10mA
	Input / Case	1800 Vac or 2500Vdc /1min leakage current< 10mA
Touch Current	1.75mA	

# LITEON Server Power Supply 2400W

EMC Requirements	
Radiated Emissions CISPR 22/ EN55022/ FCC Part 15	Class A / -6dB
Conducted Emissions CISPR 22/ EN55022/ FCC Part 15	Class A / -6dB
EN61000-3-2 Harmonics (AC Rated Input Current $\leq 16A$ per phase)	Class A
IEC61000-4-2 ESD	$\pm 8kV$ Contact / $\pm 15kV$ Air
IEC61000-4-3 Radiated Immunity	Performance Criteria A required
IEC61000-4-4 EFT (5kHz and 100kHz repetition rates), EN55024	1kV, Performance Criteria A required.
IEC61000-4-5 Surge and EN55024	$\pm 2.0 kV/2ohm$ CM, $\pm 1.0 kV/2ohm$ DM, Criteria A
IEC61000-4-6 Conducted Immunity and EN55024	Performance Criteria A required.
IEC61000-4-11 Voltage dips, short interruptions and voltage variations immunity tests	Requirements for Voltage Dips and Short Interruptions as specified in EN55024, CISPR 24, EN300386, and EN61000-6-1.

## LITEON Server Power Supply 2400W

### Dimension

