

LITEON Server Power Supply 1500W, 54.5mm

Features:


- DC steady state range: 45Vdc ~ 53Vdc
- Output Voltage 12 Vdc, + 3.3 VSB
- N+N (max.=4) Redundant power supply with Hot plug, current sharing & remote sensing
- Self-cooling with fan speed control
- PMBus Compliant 1.2
- Protection include OCP, OVP, UVP, OTP and Brownout
- 1500W is in 54.5mm (W) x40mm (H) x 321.5mm (L)
- Altitude: 3,000 meters
- Operating Temperature: -5°C ~ 45°C(1500W)
- Compliance EMC EN55032/CISPR 32 and FCC Part 15
- EMI Class A, -8dB margin
- Safety Certificates: IEC/EN 60950-1, IEC/EN62368-1 and UL/CSA62368-1 2nd Ed




Electrical Specifications:


Parameter	Description	Parameter	Description
Input voltage	DC input 45Vdc ~ 53Vdc	Main Output Voltage(12VDC)	12.0Vdc ± 3%
		SB Output Voltage (SB)	3.3Vdc ± 5%
iTHD	NA	12VDC Current Rating	125A @ 45Vdc ~ 53Vdc
Power Factor (PF)	NA	Capacitive Load	30,000uF
		SB Current Rating	2A
Efficiency	96% @ 50% load	Power Rating	1500W @ 45Vdc ~ 53Vdc
Redundant	N+N Redundant, 4pcs maximum	Hold Up Time	NA

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 Protection			
Parameter	Description	Parameter	Description
12VDC OCP @ High Line	Current is 135-145A for 300ms, or above 145A immediate (Latch mode)	SB OCP	Current is 2.4A~3A (Latch mode)
12VDC OCP @ Low Line	NA	SB OVP	Voltage is above 3.8V~4.2V (Latch Mode)
12VDC OVP	Voltage is above 13.3V~14.8V (Latch Mode)		
12VDC UVP	Voltage is below 10.0V ~ 11.0V (Latch Mode)	Over Temperature	Ambient Temperature (Auto recovery mode)
Input Brownout	Voltage is 40-42Vdc (Auto recovery mode)	Input OVP	Voltage is above 57-59Vdc (Auto recovery mode)
High Line Mode to Low Line Mode	NA		

 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
		ALERT_L	Output signal ALERT_L = LOW to indicate WARNING event (Event Programmable)
PSKILL_H	Input signal PSKILL_H = HIGH to disable 12VDC	LED	Blue Flashing --> Standby mode
			Blue Solid --> 12VDC active mode
			Amber Solid --> Fault protection Amber Flashing -> warning event.
PWOK_H	Output signal PWOK_H = High to indicate the 12VDC existence	ACOK_H	Output signal ACOK_H = High to indicate Input existence

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 Environment / Reliability			
Parameter	Description	Parameter	Description
Operation Temp.	-5deg.C ~ +45deg.C (1500W Full Load).	MTBF	140K hours at 100% rated load,41°C amb. temp.
Operating Humidity	5% ~ 90%	ECAP Life	10 years at 80% rated load, 40°C amb. temp.
Storage Temp.	-40°C ~85°C	Air Flow	Normal Mode
Storage Humidity	5% ~ 95%	Fan Life	70K hours at 80% rated load,40°C amb. temp.
Operating Altitude	3000 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	1414VDC/1min
	Input / Case	1414VDC/1min
Touch Current	NA	
EMC Requirements		
Radiated Emissions EN55032/CISPR 32 and FCC Part 15	Class A / -8dB	
Conducted Emissions EN55032/CISPR 32 and FCC Part 15	Class A / -8dB	
EN61000-3-2 Harmonics (AC Rated Input Current <=16A per phase)	NA	
EN61000-3-3 Voltage Fluctuations and Flicker (AC Rated Input Current <=16A per phase)	NA	
EN/IEC61000-4-2 ESD	8kV Contact / 15kV Air	
IEC61000-4-3 Radiated Immunity	10V/m, Performance Criteria A required	
IEC61000-4-4 EFT (5kHz and 100kHz repetition rates)	± 1kV, Performance Criteria A required.	
EC61000-4-5 Surge (For NEBS requirement)	±1.0 kV in CM, 0.5 kV DM.	

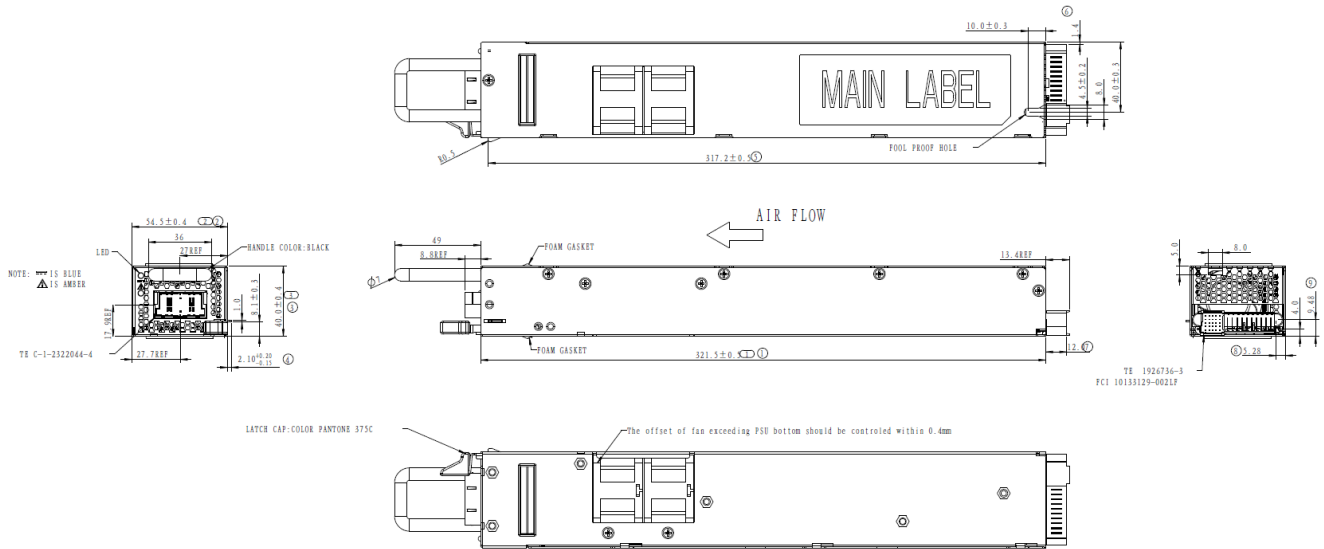


LITEON Server Power Supply 1500W, 54.5mm

IEC61000-4-6 Conducted Immunity	10Vrms, Performance Criteria A required
IEC61000-4-11 Voltage dips, short interruptions and voltage variations immunity tests	NA

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Dimension:



DC Inlet Socket		
Connector Type	TE 1-2322044-4	
Drawing		
Output Connector and Assignment		
Connector Type	Amphenol 10133129-002LF	
Drawing		
Pin Definition		
Pin #	Function	Describe
6-10	V1 (12VDC)	12VDC main output
1-5	PGND	Power ground(return)
A1	VS1 (3.3VSB)	Standby positive output

LITEON Server Power Supply 1500W, 54.5mm

B1	VSB (3.3VSB)	Standby positive output
C1	VSB (3.3VSB)	Standby positive output
D1	VSB (3.3VSB)	Standby positive output
E1	VSB (3.3VSB)	Standby positive output
A2	SGND	Signal ground(return)
B2	SGND	Signal ground(return)
C2	N/C	Reserved
D2	VSB_SENSE_R	Standby output negative sense
E2	VSB_SENSE	Standby output positive sense
A3	APS	<p>I²C address, Following are external resistor (APS to SGND) setting:</p> <p>820 ohm, unit: 0xB0, EEPROM: 0xA0</p> <p>2700 ohm, unit: 0xB2, EEPROM: 0xA2</p> <p>5600 ohm, unit: 0xB4, EEPROM: 0xA4</p> <p>8200 ohm, unit: 0xB6, EEPROM: 0xA6</p>
B3	N/C	Reserved
C3	SDA	I2C data signal line
D3	V1_SENSE_R	Main output negative sense
E3	V1_SENSE	Main output positive sense
A4	SCL	I2C clock signal line
B4	PSON_L	<p>Power supply control / Input</p> <p>LOW = to turn on 12VDC</p> <p>HIGH = to turn off 12VDC</p>
C4	SMB_ALERT_L	<p>SMB Alert / Output</p> <p>LOW = PSU Fault or is Warning</p> <p>HIGH = PSU is normal</p>
D4	N/C	Reserved
E4	VIN_GOOD	<p>AC Power Indicator / Output</p> <p>High = AC Power exist</p> <p>LOW = AC power is Loss</p>
A5	PSKILL_H	<p>Power supply disable control / Input</p> <p>HIGH = to disable 12VDC (12VDC shut down)</p> <p>LOW = to enable 12VDC</p>
B5	ISHARE	Current share bus
C5	POK_H	<p>12VDC Work Indicator / Output</p> <p>HIGH = 12VDC exist and work well</p> <p>Low = 12VDC is Loss.</p>
D5	N/C	Reserved
E5	PRESENT_L	Power supply present: Active-Low



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