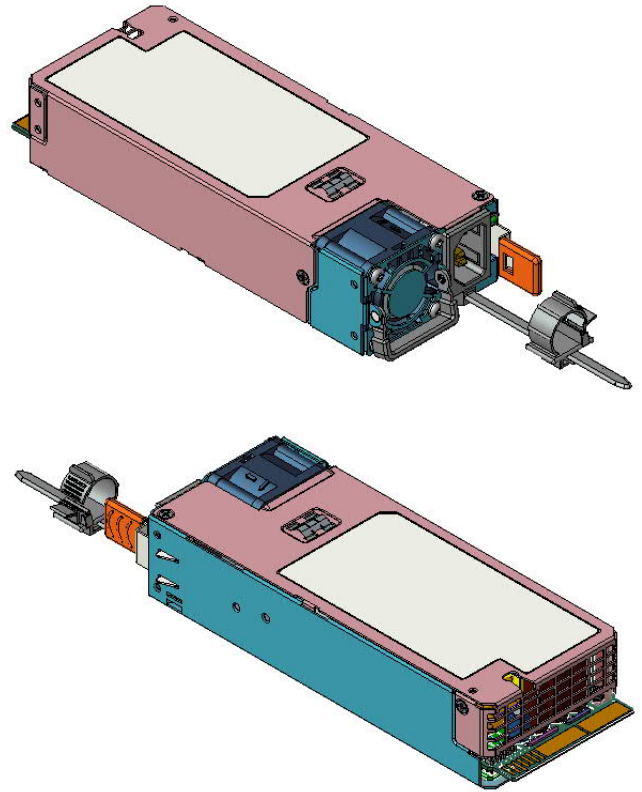


LITEON Server Power Supply 1600W

Features:

- 80 PLUS® Platinum
- Holdup Time: $\geq 12\text{ms}$
- AC Input Range 90Vac ~ 264Vac
- DC Input Range 180Vdc ~ 310Vdc
- Output Voltage 12 Vdc
- N+N (N=2 max) Redundant power supply with Hot plug, current sharing
- Self-cooling with fan speed control / One Bi-color LED indicators
- PMBus Compliant 1.2
- Protection include OCP, OVP, UVP, OTP and Brownout
- 1600W is in 73.5mm (W) x40.0mm (H) x 185mm (L)
- Altitude: 5,000 meters
- Operating Temperature: 0°C ~ 55°C
- Compliance EMC IEC/EN 61000
- EMI Class A, -6dB margin
- Safety Certificates: IEC/EN 60950-1, IEC/EN62368-1 and UL/CSA62368-1 2nd Ed



Electrical Specifications:

Parameter	Description	Parameter	Description
Input voltage	AC input 90Vac ~ 264Vac DC input 180Vdc ~ 310Vdc	Main Output Voltage(12VDC)	12.2Vdc \pm 5%
		ST Output Voltage (SB)	Reserved
iTHD	50% load < 5%	12VDC Current Rating	131.2A @ 180Vac~264Vac 82A @ 90Vac~132Vac
Power Factor	PF > 0.98 @ 50% load above /208Vac ~ 240Vac	Capacitive Load	2,200uF ~ 22,000uF
		SB Current Rating	Reserved
Efficiency	80 PLUS® Platinum Flat 94%@20%~50% load	Power Rating	1600W@230Vac & 240Vdc; 1000W@115Vac
Redundant	N+N Redundant, N=2 maximum	Hold Up Time	12ms

LITEON Server Power Supply 1600W

Protection			
Parameter	Description	Parameter	Description
12VDC OCP @ High Line	Current is above 171A for 11.1s, or Current is above 191A for 100ms, or Current is above 197A for 5ms (Latch mode)	SB OCP	Reserved
12VDC OCP @ Low Line	Current is above 94.3A for 11.1s, or Current is above 98.4A for 100ms, (Latch mode)	SB OVP	Reserved
12VDC OVP	Voltage is above 13.5V~15V (Latch Mode)		
12VDC UVP	Voltage is below 10.9V ~ 10V (Latch Mode)	Over Temperature	Ambient Temperature (Auto recovery mode)
Input Brownout	Voltage is below 80Vac (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
		ALERT_L	Output signal ALERT_L = LOW to indicate WARNING event (Event Programmable)
PWOK_H	Output signal PWOK_H = High to indicate the 12VDC existence	LED	1Hz Blink Green --> AC present but no output
			2Hz Blink Green --> FW updating
			0.33Hz Blink GREEN(1s OFF,2s GREEN) --> CR mode
			1Hz Blink Amber --> warning Event
			Amber Solid --> Fault protection
			Green Solid --> 12VDC active mode
ACOK_H	Output signal ACOK_H = High to indicate Input existence	ASP	Resistor to set PSU address (Support 4 units address)

LITEON Server Power Supply 1600W

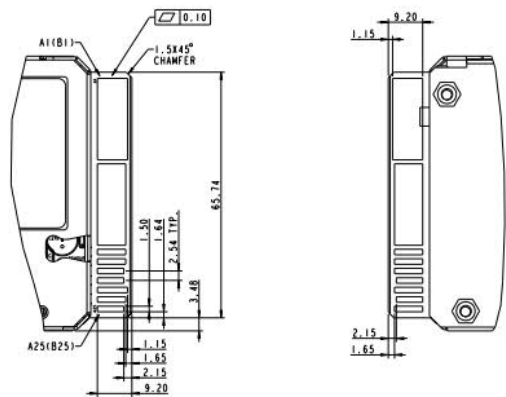
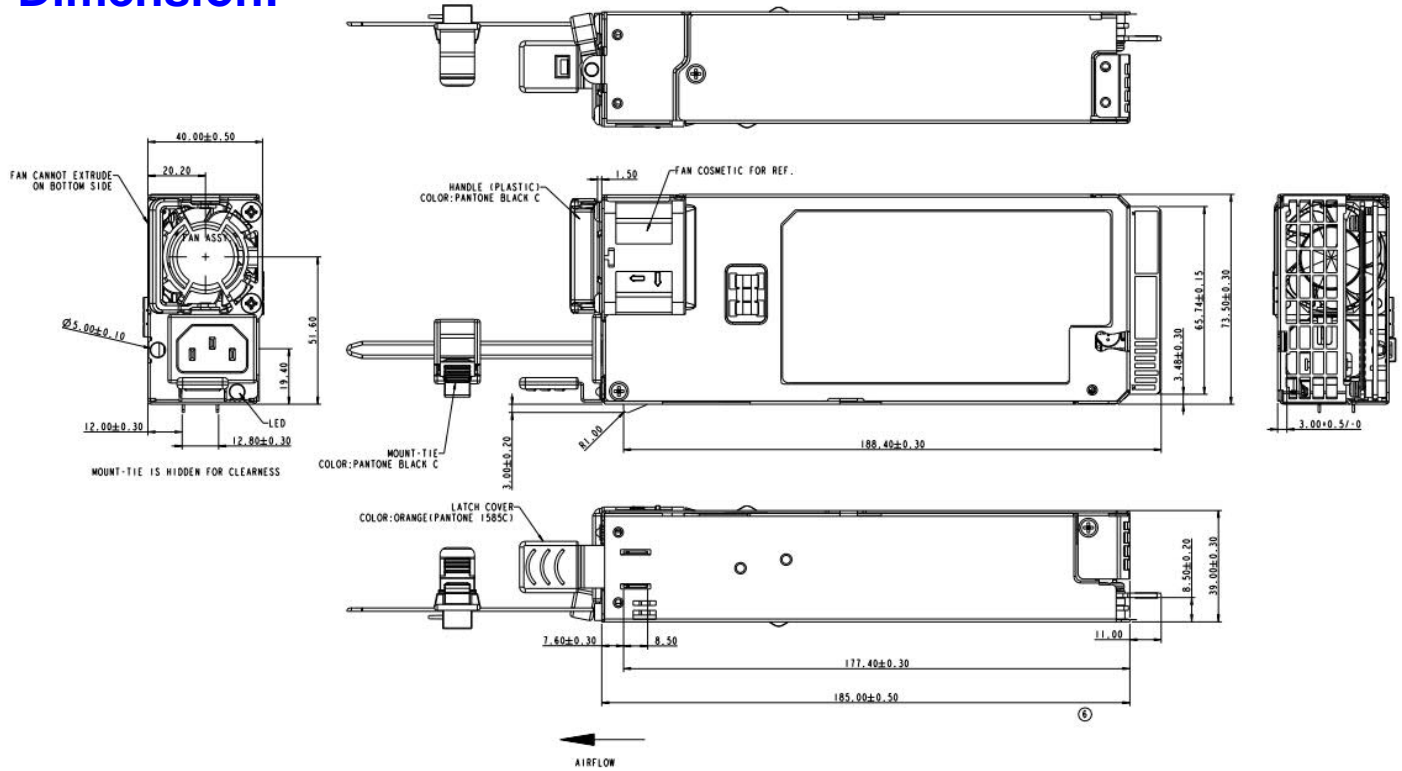
Environment / Reliability			
Parameter	Description	Parameter	Description
Operation Temp.	0°C ~ 55°C	MTBF	200K hours at rated 100% load 230Vac input, 55°C ambient. temp.
Operating Humidity	5% ~ 90%	ECAP Life	5 years at rated 100% load 230Vac input, 55°C ambient. temp.
Storage Temp.	-40°C ~ 85°C	Air Flow	Normal Mode, From DC to AC
Storage Humidity	5% ~ 95%	Fan Life	5 years at rated load, 55°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	1500 Vac/1min leakage current< 10mA
	Input / Case	1500 Vac/1min leakage current< 10mA
Touch Current		0.875mA

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 <=16A per phase)	Class A
EN61000-3-3 Voltage Fluctuations and Flicker (AC Rated Input Current <=16A per phase)	Pst<=1.0 & Plt <= 0.65, dc<=3.3%,dmax<=4%, time <=500ms when d(t)>3.3%
IEC61000-4-2 ESD	±8kV Contact / ±15kV Air
IEC61000-4-3 Radiated Immunity	Performance Criteria A required
IEC61000-4-4 EFT (5kHz and 100kHz repetition rates) , EN55024	0.5kV, Performance Criteria A required. 2kV, Performance Criteria B required
IEC61000-4-5 Surge and EN55024	±2.0 kV/2ohm CM, ±2.0 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 1600W

Dimension:



PIN DEFINITION OF GOLD FINGER:

PIN	SIGNAL NAME	PIN	SIGNAL NAME
A1~A9	GND	B1~B9	GND
A10~A18	+12V	B10~18	+12V
A19	SDA	B19	A0
A20	SCL	B20	A1
A21	PSON	B21	12VSB/RESERVED
A22	SMB-ALERT	B22	CR_1
A23	RETURN_S	B23	12VLS
A24	+12VRS	B24	-PS_PRESENT
A25	PWOK	B25	VIN_GOOD

TOLERANCE OF ALL DIMENSIONS ARE ± 0.25 MM UNLESS OTHERWISE SPECIFIED

*DETAIL SEE EE SPECIFICATION.
PCB TOLERANCE FOLLOWING LITEON PT-2006.C PCB FABRICATION SPECIFICATION AND RELATED DOCUMENT.
MATING CONNECTOR IS FCI 10035388-102LF OR EQUIVALENT.