

## LITEON Server Power Supply 600W, 54.5mm

### Features:


- 80 PLUS® Platinum
- Holdup Time:  $\geq 4\text{ms}$  @600W
- DC Input Range: -36Vdc ~ -75Vdc
- Output Voltage 12 Vdc, + 5 VSB
- N+N (max.=4) Redundant power supply with Hot plug, current sharing & remote sensing
- Self-cooling with fan speed control / one Bi-color LED indicators
- PMBus Compliant 1.2
- Protection include OCP, OVP, UVP, OTP and Brownout
- 600W is in 54.5mm (W) x40mm (H) x 200mm (L)
- Altitude: 5,000 meters
- Operating Temperature: -40°C ~ 70°C(600W)
- Compliance EMC IEC/EN 6100
- EMI Class B, -4dB margin
- Safety Certificates: IEC 60950-1, IEC62368 2nd, IEC/EN 62368 3rd and UL/CSA62368-1 2nd Ed




### Electrical Specifications:


Parameter	Description	Parameter	Description
Input voltage	DC input -36Vdc ~ -75Vdc	Main Output Voltage(12VDC)	12.0Vdc $\pm$ 5%
		SB Output Voltage (SB)	5.0Vdc $\pm$ 5%
iTHD	NA	12VDC Current Rating	50A @ -36Vdc ~ -75Vdc
Power Factor (PF)	NA	Capacitive Load	25,000uF
		SB Current Rating	3A
Efficiency	94% @ 50% load	Power Rating	600W @ -36Vdc ~ -75Vdc
Redundant	N+N Redundant, 4pcs maximum	Hold Up Time	4ms @ 600W

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 <b>Protection</b>			
Parameter	Description	Parameter	Description
12VDC OCP @ High Line	Current is above 65A for 1s, or Current is above 72.5A for 20ms (Hiccup mode)	SB OCP	Current is above 5.1A (Hiccup mode)
12VDC OCP @ Low Line	NA	SB OVP	Voltage is above 6.0V~7.2V (Auto recovery mode)
12VDC OVP	Voltage is above 13.3V~15.6V (Latch Mode)		
12VDC UVP	Voltage is below 10.0V ~ 11.0V (Hiccup Mode)	Over Temperature	Ambient Temperature (Auto recovery mode)
Input Brownout	Voltage is below -32Vdc (Auto recovery mode)	Input OVP	Voltage is above 85Vdc (Auto recovery mode)
High Line Mode to Low Line Mode	NA		

 <b>Control Signal / Indicate Signal / LED</b>			
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	Green Flashing --> Standby mode
			Green Solid --> 12VDC active mode
			Amber Solid --> Fault protection Amber Flashing -> warning event.
PWOK_H	Output signal PWOK_H = High to indicate the 12VDC existence	INPUTOK_H	Output signal INPUTOK_H = High to indicate Input existence

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 <b>Environment / Reliability</b>			
Parameter	Description	Parameter	Description
Operation Temp.	-40deg.C ~ +70deg.C (600W Full Load).	MTBF	200K hours at rated load, 50°C amb. temp.
Operating Humidity	5% ~ 95%	ECAP Life	5 years at rated load, 50°C amb. temp.
Storage Temp.	-40°C ~ 85°C	Air Flow	Reverse mode: Reservation
Storage Humidity	5% ~ 100%	Fan Life	5 years at rated load, 50°C amb. temp.
Operating Altitude	5000 meters		

<b>Safety Approvals</b> IEC 60950-1, IEC62368 2nd, IEC/EN 62368 3rd and UL/CSA62368-1 2nd Ed		
Insulation safety rating	Input / Output	Reinforce
	Input / Case	Basic
	Output / Case	Basic
Hi-pot strength	Input / Output	2250VDC/1min
	Input / Case	2250VDC/1min
Touch Current	NA	
<b>EMC Requirements</b>		
Radiated Emissions CISPR 22/ EN55022/ FCC Part 15	Class B / -4dB	
Conducted Emissions CISPR 22/ EN55022/ FCC Part 15	Class B / -4dB	
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	
IEC61000-4-2 ESD	8kV Contact / 15kV Air	
IEC61000-4-3 Radiated Immunity	80-1000Mhz 3V/m, Criteria A	
IEC61000-4-4 EFT (5kHz and 100kHz repetition rates)	1KV, Criteria A.	
EC61000-4-5 Surge (For NEBS requirement)	±1.0 kV CM, ±1.0 kV DM, Criteria A	

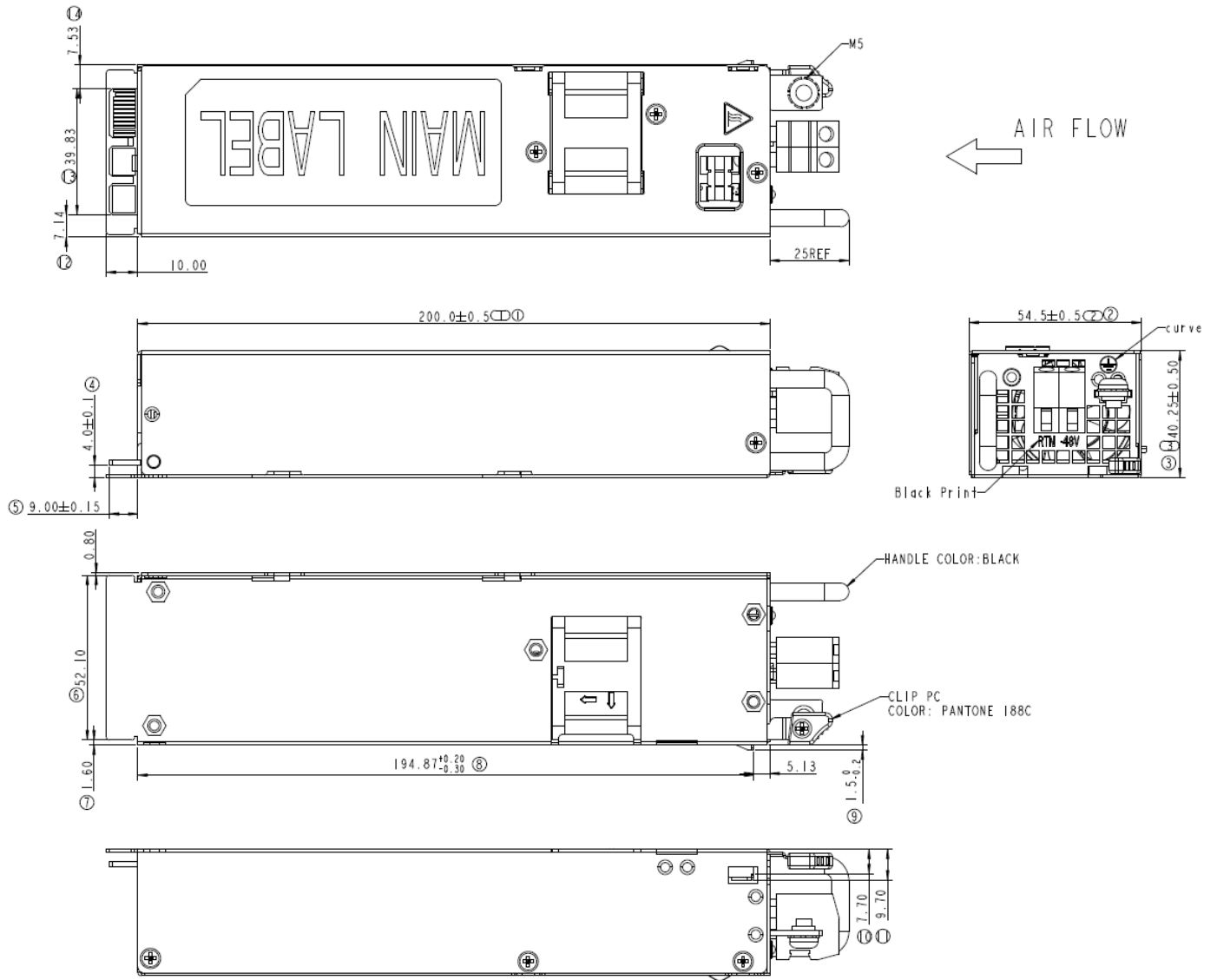


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IEC61000-4-6 Conducted Immunity	150KHz-80MHz, 3Vrms, Performance Criteria A required
IEC61000-4-11 Voltage dips, short interruptions and voltage variations immunity tests	NA

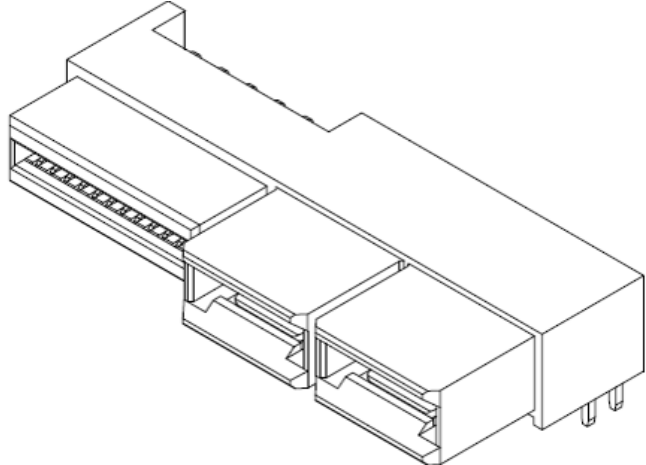
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### Dimension:



DC Inlet Socket	
Connector Type	HDFK4-0707086
Drawing	
Output Connector and Assignment	

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Connector Type	ALLTOP-C21402-126H5-L
Drawing	

Pin Definition			
PIN	Name	PIN	Name
TP2	GND	BP2	+12V
TP1	GND	BP1	+12V
TS12	5V STBY	BS24	5V STBY
TS11	5V STBY	BS23	5V STBY
TS10	Reserved	BS22	A1 (SMBus address)
TS9	Reserved	BS21	PW_OK
TS8	Reserved	BS20	PS_ON
TS7	INPUT_OK	BS19	PS_KILL
TS6	Reserved	BS18	PMBus SCL
TS5	Reserved	BS17	PMBus SDA
TS4	Reserved	BS16	Subsalt
TS3	A0 (SMBus address)	BS15	ISHARE
TS2	PRESENT	BS14	M_SENSE_RTN
TS1	NC	BS13	MAIN_SENSE