

SPECIFICATION

Open Frame Power Supply Universal AC Input 120W 19VDC Output



P/N: N1120LN-19

****Specification Approval****

This specification (including cover page) is approved in its entirety by:

Company Name

Print Name

Signature

Date

Specification subject to change without prior notice.



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1. INPUT

1.1 Input Range

Parameter	Conditions / Description	Min.	Nom.	Max.	Units
Voltage	Universal-ranging	90	115	264	Vac
			230		
Current	120W Load @115Vac	--	--	2.0	Arms
	120W Load @230Vac	--	--	1.0	Arms
Frequency	Auto-ranging	47	50/60	63	Hz

1.2 Inrush Surge Current

@230Vac (Cold Start 25 °C) ----- < 80 A Typical.

2. OUTPUT

2.1 Output Power:

Convection Rating ----- 120W Max.

2.2 Output Range:

Voltage (Vdc)		Load Range (A)			Line Regulation (±0.5%)	Load Regulation (%) (Note 2)	Ripple & Noise (PARA) (mVp-p) (Note 3)
		Min.	Max. (Convection)	Peak(Note 1)			
V1	+19V	0A	6.32A	N/A		18.43~19.57Vdc (±3%)	190mVp-p

Note :

1. Peak current lasting < 60 seconds with a maximum 10% Duty Cycle.
2. Cross/Load regulation is tested at 10% to 100% of rated load.
3. Peak-to-peak at max. load (convection rating)@90Vac MIN. ; Measurements with a 20MHz bandwidth and terminated with a 10uF electrolytic Cap. in parallel with a 0.1uF ceramic Cap.

2.3 Transient (Dynamic) Response : (0.1A/uS slew rate with 50%~100% load change @100HZ)

Recovery Time to steady state ----- < 2mS
 Voltage Deviation ----- < ±10%

2.4 Overshoot/Undershoot:

Turn-on / Turn-off @115/230Vac, Full Load ----- < ±10%

3. GENERAL

3.1 Efficiency

@115/230Vac , Full Load ----- > 86%

3.2 Turn-on Time

@115/230Vac , Full Load ----- < 3 Sec

3.3 Hold-up Time

@115/230Vac , Convection Rating ----- > 16mSec

3.4 Safety Ground Leakage Current

@230Vac 50Hz ----- < 3.5mA

3.5 Withstand (Isolation) Voltage

2121Vdc , 1 Minute from Input(L1&L2) to Output ----- < 10mA

2121Vdc , 1 Minute from Input(L1&L2) to FG ----- < 10mA

3.6 MTBF

@25°C on Full Load , MIL-HDBK-217F ----- > 100KHrs

4. PROTECTION

4.1 Brown-Out Protection (@Input voltage drops down to zero then back to nominal slowly.)

All Outputs ----- Auto-recovery

4.2 Overvoltage Protection

All Outputs ----- Latch

4.3 Overcurrent(Overload) Protection (OCP Range @120%~200% above rated load)

All Outputs ----- Auto-recovery

4.4 Short Circuit Protection

All Outputs ----- Auto-recovery

4.5 Overtemperature Protection

All Outputs ----- Latch

5. ELECTROMAGNETIC COMPATIBILITY

5.1 Electromagnetic Interference (EMI/RFI)

FCC PART 15 Conducted/Radiated Emissions	-----	Class B
CISPR 22 Conducted/Radiated Emissions	-----	Class B
EN55022 Conducted/Radiated Emissions	-----	Class B

5.2 Harmonic Current

EN61000-3-2 Class D (Power Factor Correction)	-----	> 0.9
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5.3 Voltage Variation Immunity (Flicker)

EN61000-3-3	-----	Compliant
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5.4 Electrostatic Discharge (ESD) Susceptibility

EN61000-4-2 ; ±8KV Air Discharge	-----	Criterion A
EN61000-4-2 ; ±4KV Contact Discharge	-----	Criterion A
EN61000-4-2 ; ±4KV Indirect Discharge	-----	Criterion A

5.5 Radiated Susceptibility (RS)

EN61000-4-3 ; 3V/M	-----	Criterion A
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5.6 Electrical Fast Transient (EFT)/Burst

EN61000-4-4 ; Impulse ±1KV	-----	Criterion A
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5.7 Surge Susceptibility (Input Transient Protection)

EN61000-4-5 ; ±1KV Line(L1) to Neutral(L2)	-----	Criterion A
EN61000-4-5 ; ±2KV Line(L1)&Neutral(L2) to FG	-----	Criterion A

5.8 Conducted RF Immunity

EN61000-4-6 ; 3V	-----	Criterion A
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5.9 Voltage Dips/Interruptions

EN61000-4-11 ; Dips	-----	Criterion A
EN61000-4-11 ; Interceptions	-----	Criterion B

6. SAFETY

UL 60950	-----	Approval
cUL 60950	-----	Approval
TUV EN 60950	-----	Approval
CB Certificate and Report	-----	Approval

7. ENVIRONMENTAL

7.1 Temperature

Operating Range ----- 0 ~ 50 °C

Storage Range ----- -40 ~ 85 °C

7.2 Relative Humidity

Non-Condensing ----- 5 % ~ 95 % RH

7.3 Vibration

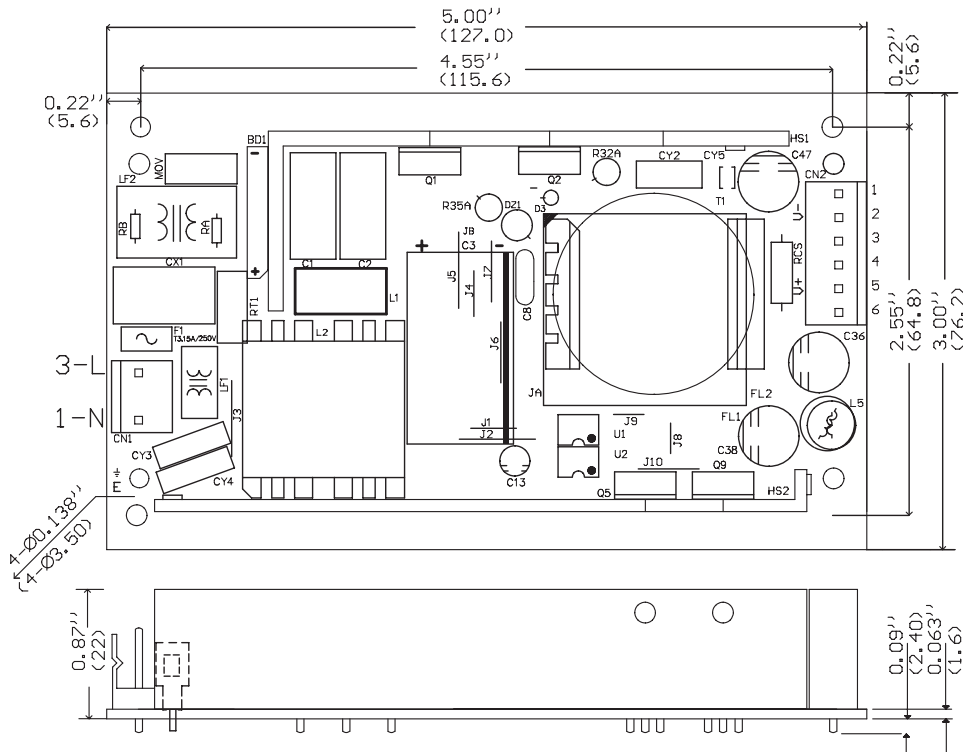
Random Operating, 3 axes, 50~500Hz, 10 minutes/axis ---- 2.4Grms Max.

7.4 Shock

Operating Half Sine, 3 axes, 10 mS, 6 shocks total ----- 20Gpk Max.

8. MECHANICAL

Drawing



← Direction of Airflow

Notes:
1. All dimensions in inches(mm)
2. Tolerance ,XX=±0.05", .XX=±0.02"

← Direction of Airflow