

SPECIFICATION

High Quality Open Frame Power Supply

Universal AC Input
120W 18VDC 6.7A
Single Output



P/N: N1120PW-18

**** Specification Approval****

This specification (total 4 pages including cover page) is approved in it's entirety by:

Company Name

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1. Scope

This specification describes the performance characteristics of a grounded, single phase, 120 Watts, with active PFC, single output open frame switching power supply defines the world wide safety requirements and EMC requirements.

This Switching Power Supply meets RoHS requirement.

2. Input

Description	Min	Typical	Max.	Condition
Input Voltage	90 VAC	115/230V	264 VAC	Full Range, 47-63Hz
Input Current	-	-	2.5A	90 VAC 50Hz
Line Frequency	47Hz	50/60Hz	63Hz	-
Inrush Current	-	-	60A	Cold Start
Efficiency	-	85%	-	115VAC at full load
Power Factor Correction		0.9		At full load

3. Output

3.1 Static DC Load, Ripple & Noise

NOMINAL VOLTAGE (DC)	TOTAL REGULATION	OUTPUT CURRENT		RIPPLE & NOISE
		MIN.	MAX. LOAD. W/CONVECTION COOLING	
18V	± 2%	0 A	6.7A	240mV

NOTE 20MHz bandwidth ripple & noise is measured using 0.1uF C.C. & 10uF/50V E.C. bypassed at the output connector.

Regulation shows the percentage of absolute value of nominal output voltage.

The total output should be 120W max. with convention cooling.

3.2 Hold up Time

The power supply unit should maintain its proper output voltage within voltage specifications at least 16 milliseconds after losing input power under the condition of typical input with full loading.

3.3 Overshoot

Any overshoots during turn-on/turn-off should be less than +/-5% of the voltage regulation tolerance. No voltage of opposite polarity shall be present on any output during turn-on or turn-off.

3.4 Temperature Coefficient

The temperature coefficient of all outputs is +/-0.05% per degree C maximum.

4. Protection

4.1 Over Voltage

If any over voltage occurs, the power supply should latch off before any output exceeds its limit below

NOMINAL VOLTAGE	OVER VOLTAGE RANGE	
	FROM	TO
+18VDC	+20VDC	+24VDC

4.2 Short Circuit

Short circuit occurred on +18V output should not cause any damage to the power supply but shut down the power supply. The power supply will be automatically recovered after the short circuit being removed.

4.3 Over Load

An over load protection will be effected when the loadings: +18V exceeds +105% to +150%. The power supply will be automatically recovered after the overload being removed.

4.4 Over Temperature

85 degrees centigrade (This temperature is sensed at HS2 & 40 degrees centigrade ambient) typical. Supply to have automatic shutdown.

5. Safety

UL/CUL - UL60950-1 , CSA 22.2 NO. 60950-1

TUV - EN60950-1

CB - IEC60950-1

5.1 Dielectric Withstand

--- Primary to Secondary : 4242VDC for 2 Sec.

--- Primary to Frame Ground : 2121VDC for 2 Sec.

5.2 Insulation Resistance

--- Primary to Secondary : 20 Meg. Ohms Min. 500 VDC.

--- Primary to Frame Ground : 20 Meg. Ohms Min. 500 VDC.

6. Electromagnetic Compatibility

Tests for conformance to this requirements will be performed with host system.

6.1 FCC Requirements

The power supply shall comply with the FCC "Class B" conducted.

6.2 CE Requirements

The power supply shall conform to meet the "Class B" requirements of EN55022

7. Environmental

7.1 Operating

Temperature	0 to 40 degrees centigrade
Relative Humidity	20 to 90 percent, non-condensing

7.2 Shipping and Storage

Temperature	-10 to +70 degrees centigrade
Relative Humidity	20 to 95 percent, non-condensing

8. Burn in Test: 100% burn-in tested at max. load under 40 +/-5 degree centigrade.

9. Mechanical

