

DESCRIPTION

The PUP120 series of AC/DC switching power supplies are for 96 to 120 watts of continuous output power. They are enclosed in a 94V-1 rated polyphenylene-oxide case with an IEC 320/C6 inlet to mate with interchangeable cord for world-wide use. All model meet CISPR 22 and FCC class B emission limits, and comply with UL, CSA, IEC and CE requirements.

Note: Warranty period for PUP120 series is one year.

FEATURES

- High Efficiency
- Low Ripple & Noise
- Overvoltage protection
- Short-circuit protection
- Overpower protection
- Over temperature protection
- 100% burn-in at full rated load
- Standby consumption less than 0.75W

INPUT SPECIFICATIONS

Input voltage :	90 to 264 VAC
Input frequency :	47 to 63 Hz
Input current :	1.6A (rms)for 115VAC 0.8A (rms) for 230VAC
Leakage current :	150 uA max. @ 115VAC, 60Hz 250uA max. @ 230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current :	See rating chart
Total output power :	See rating chart
Ripple and noise :	2% peak to peak maximum
Overvoltage protection :	Set at 110-140% of its nominal output voltage
Overcurrent protection :	All models protected to short circuit conditions
Temperature coefficient :	All outputs $\pm 0.04\%$ / $^{\circ}\text{C}$ maximum
Transient response :	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500us after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature :	0 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$
Storage temperature :	-20 $^{\circ}\text{C}$ to +80 $^{\circ}\text{C}$
Relative humidity :	10% to 95% non-condensing

PUP120 SERIES



New!!



Safety Standard Approvals :



UL 60950 3rd, CSA C22.2 NO. 60950 3rd
File No. E137410



Nemko EN60950: 2000
Certificate NO. PO4202683

GENERAL SPECIFICATIONS

Hold-up time :	15 msec minimum at 115VAC
Turn on delay time :	2 S maximum
Power Factor :	0.98 typical at 115VAC
Efficiency :	86% min. (80% min. for PUP120-12 & PUP120-13)
Line regulation :	$\pm 0.5\%$ maximum at full load
Inrush current :	60 amps @ 115VAC, or 120 amps @ 230VAC, at 25 $^{\circ}\text{C}$ cold start
Withstand voltage :	3000VAC from input to output 1500VAC from input to ground
MTBF :	100,000 hours at full load at 25 $^{\circ}\text{C}$ ambient, calculated per MIL-HDBK- 217F
EMC performance (EN55024)	
EN55022:	Class B conducted, Class B radiated
FCC:	Class B conducted, Class B radiated
VCCI:	Class B conducted, Class B radiated
EN61000-3-2:	Harmonic distortion, Class A and D
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, $\pm 8\text{KV}$ air and $\pm 4\text{KV}$ contact
EN61000-4-3:	Radiated immunity, 3V/m
EN61000-4-4:	Fast transient/burst, $\pm 1\text{KV}$
EN61000-4-5:	Surge, $\pm 1\text{KV}$ diff., $\pm 2\text{KV}$ com.
EN61000-4-6:	Conducted immunity, 3Vrms
EN61000-4-8:	Magnetic field immunity, 1A/m
EN61000-4-11:	Voltage dips, 30% reduction for 500ms and $>95\%$ reduction for 10ms

UNIVERSAL INPUT

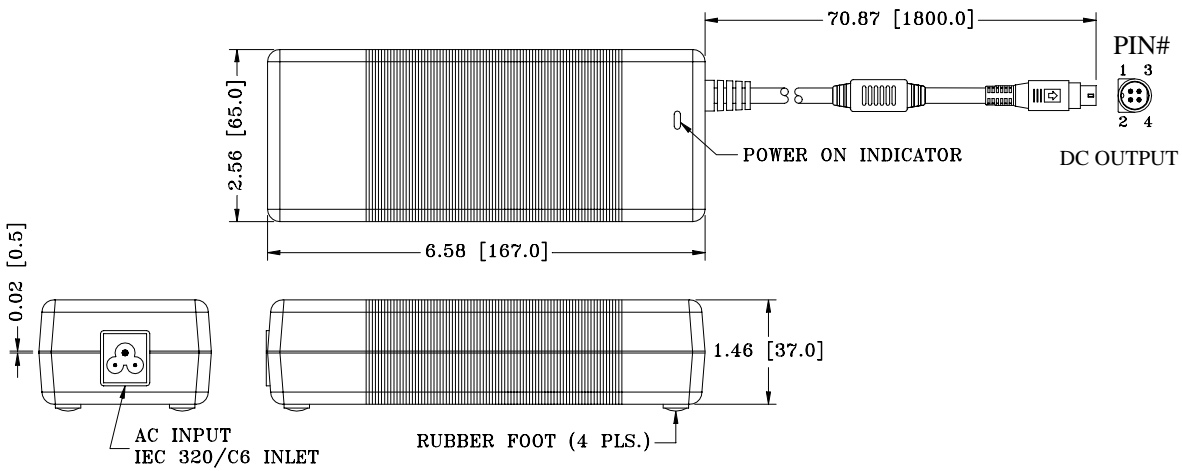
PUP120 SERIES

OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Vnom.	Output			Tol.	Maximum Output Power
		I _{max.}	I _{min.}			
PUP120-12	12V	8.0A	0A		5%	96W
PUP120-13	15V	7.0A	0A		5%	105W
PUP120-13-1	18V	6.67A	0A		5%	120W
PUP120-13-2	19V	6.32A	0A		5%	120W
PUP120-13-3	20V	6.0A	0A		5%	120W
PUP120-14	24V	5.0A	0A		5%	120W
PUP120-16	30V	4.0A	0A		5%	120W
PUP120-17	36V	3.34A	0A		5%	120W
PUP120-18	48V	2.5A	0A		5%	120W

Notes: Ripple and noise: Peak-to-peak with 20MHz bandwidth and 10uF tantalum capacitor in parallel with a 0.1uF ceramic capacitor at rated line voltage and load ranges.

MECHANICAL SPECIFICATIONS



NOTES:

- Dimensions show in inch [mm]
- Tolerance 0.02 [0.5] maximum
- Weight: 621 grams approx.
- See pages 6-27 for optional output connector. Add the suffix assigned for a selected connector to a wanted model number, e.g. PUP120-14-HB, for ordering. The output connector shown is for model PUP120-1X-HB, and its pinning is as shown in the following pin chart.

PIN CHART

Model no.	Pin no.	1	2	3	4	Shell of connector
PUP120-12	PUP120-13	Return	Output +V	Return	Output +V	Return
PUP120-13-1	PUP120-13-2					
PUP120-13-3	PUP120-14					
PUP120-16	PUP120-17					
PUP120-18						