

DESCRIPTION

The PUP180 series of AC/DC switching power supplies are for 180 watts of continuous output power. They are enclosed in a 94V-1 rated polyphenylene-oxide case with an IEC 320/C14 or C6 inlet to mate with interchangeable cord for world-wide use. All models meet CISPR 22 and FCC class B emission limits, and comply with UL,CSA,IEC and CE requirements.

Note: Warranty period for PUP180 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
- Compliant with CEC and Energy Star efficiency level IV requirements
 - * No load power consumption less than 0.5W
 - * Average active efficiency $\geq 85\%$
- Compliant with RoHS requirements

New!!

INPUT SPECIFICATIONS

Input voltage : 90 to 264VAC
Input frequency : 47 to 63 Hz
Input current : 2.5A (rms) for 115VAC
 1.25A (rms) for 230VAC
Earth leakage current: 150uA max. @ 115VAC, 60Hz
 (Touch current) 250uA max. @ 230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current : See rating chart
Total output power : See rating chart
Ripple and noise : 380mV 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°C to +40°C
Storage temperature : -20°C to +80°C
Relative humidity : 10% to 90% non-condensing

PUP180 SERIES



Safety Standard Approvals :

UL 60950, CSA C22.2 NO. 60950

TÜV EN60950-1

GENERAL SPECIFICATIONS

Hold-up time : 5 mS minimum at 100VAC or 240VAC
Turn on delay time : 3 S maximum at 100VAC
Power Factor : 0.95 typical
Efficiency : 87% minimum at 100VAC or 240VAC.
Line regulation : $\pm 0.5\%$ maximum at full load
Inrush current : No damage
Withstand voltage : 3000VAC from input to output
 1500VAC from input to ground
MTBF : 100,000 hours at full load at 25°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 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

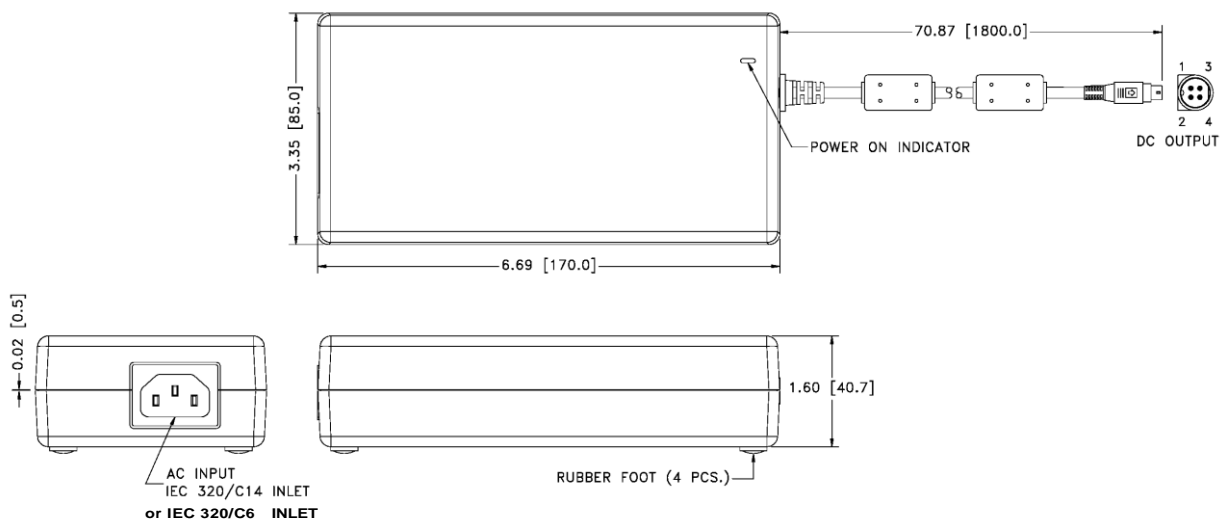
PUP180 SERIES

OUTPUT VOLTAGE/CURRENT RATING CHART

MODEL	Vnom.	Imax.	Output			Maximum Output Power
			Imin.	Tol.		
PUP180-13-1	18V	10.0A	0A	5%	180W	
PUP180-13-2	19V	9.47A	0A	5%	180W	
PUP180-14	24V	7.5A	0A	5%	180W	
PUP180-18	48V	3.75A	0A	5%	180W	

NOTE: 1. Ripple and noise: Peak-to-peak with 20MHz bandwidth and 47uF tantalum capacitor in parallel with a 0.1uF ceramic capacitor at rated line voltage and load ranges.
 2. To order a model with IEC320/C6 inlet, add suffix "S" to the PUP180, e.g. PUP180S-14.

MECHANICAL SPECIFICATIONS



NOTES:
 1. Dimensions shown in inches [mm]
 2. Tolerance 0.02 [0.5] maximum
 3. Weight: 860 grams approx.
 4. For optional output connectors, please consult factory

PIN CHART

MODEL	PIN	1	2	3	4	Shell of connector
PUP180-13-1 PUP180-14	PUP180-13-2 PUP180-18	Output +V	Output +V	Return	Return	Return