

## DESCRIPTION

The PMP66N1 series of AC/DC switching power supplies are for 65 watts of continuous output power. They are enclosed in a 94V-0 rated polycarbonate case with an IEC320/C14 inlet to mate with interchangeable cord for world-wide use. All models meet EN55011 class B emission limits, and are designed for medical applications.

## FEATURES

- High efficiency
- Low safety ground leakage current
- Wide input range 90 to 265 VAC
- 100% burn-in
- Overvoltage protection
- Over temperature protection
- Short-circuit protection
- Compliant with CEC and Energy Star Efficiency level VI requirements
  - \* No load power consumption less than 0.21 W
  - \* Average active efficiency greater than 88%
- Compliant with RoHS requirements

## INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	1.4 A (rms) for 115 VAC 0.8 A (rms) for 230 VAC
Earth leakage current:	150 $\mu$ A max. @ 264 VAC, 63 Hz
Touch current:	100 $\mu$ A max. @ 264 VAC, 63 Hz

## OUTPUT SPECIFICATIONS

Output voltage /current:	See rating chart.
Maximum output power:	See rating chart.
Ripple and noise:	1% peak to peak maximum
Over voltage protection:	Provided and set at 112-140% of its nominal output voltage, latching by recycle input to reset
Short circuit protection:	Automatic recovery
Over temperature protection:	Latching by recycle input to reset
Temperature coefficient:	$\pm 0.04\%$ / $^{\circ}$ C maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 $\mu$ s after a 25% step load change

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	0 $^{\circ}$ C to +70 $^{\circ}$ C
Storage temperature:	-20 $^{\circ}$ C to +85 $^{\circ}$ C
Relative humidity:	10% to 90% non-condensing
Temperature derating:	Derate from 100% at +40 $^{\circ}$ C linearly to 70% at +70 $^{\circ}$ C

## PMP66N1 SERIES



## SAFETY STANDARD APPROVALS



UL ES 60601-1, CSA C22.2 No. 60601-1  
File No. E211696



TÜV EN 60601-1

## GENERAL SPECIFICATIONS

Switching frequency:	25-125 KHz
Efficiency:	88% min.
Hold-up time:	10 ms minimum at 115 or 230 VAC
Line regulation:	$\pm 0.5\%$ maximum at full load
Inrush current:	50 A @ 115 VAC or 100 A @ 230 VAC, at 25 $^{\circ}$ C cold start
Withstand voltage:	4000 VAC from input to output (2MOPP), 1500 VAC from input to ground (1MOPP), 500 VAC from output to ground
MTBF:	150,000 hours at full load at 25 $^{\circ}$ C ambient , calculated per MIL-HDBK-217F
EMC Performance (EN60601-1-2)	
EN55011:	Class B conducted, class B radiated
EN61000-3-2:	Harmonic distortion, class A
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, $\pm 15$ KV air and $\pm 8$ KV contact
EN61000-4-3:	Radiated immunity, 9-28V/m
EN61000-4-4:	Fast transient/burst, $\pm 2$ KV
EN61000-4-5:	Surge, $\pm 1$ KV diff., $\pm 2$ KV com
EN61000-4-6:	Conducted immunity, 10 Vrms
EN61000-4-8:	Magnetic field immunity, 30 A/m
EN61000-4-11:	Voltage dip immunity, 30% reduction for 500 ms, 100% reduction for 10 ms

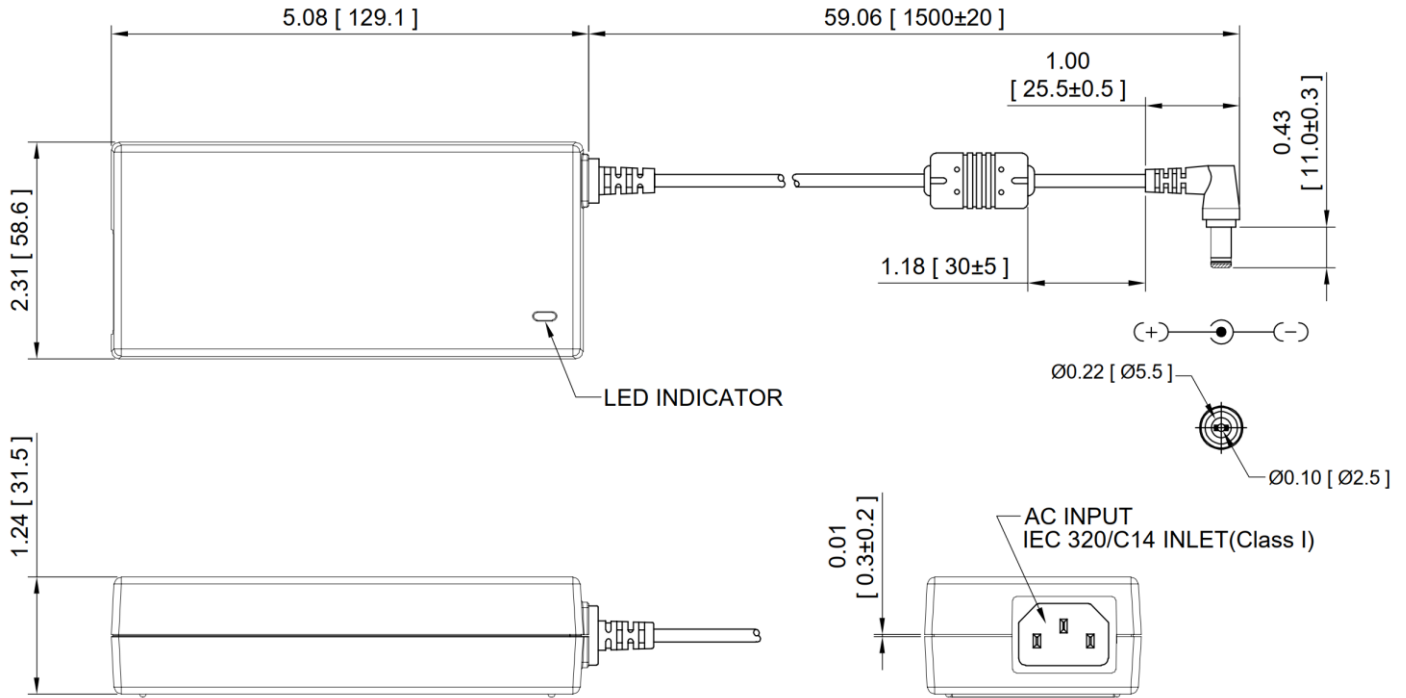
## OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output						Average Active Efficiency (typical) @ 115 / 230 Vac	
	Class I	V1	Min. Current	Max. Current	Tol.	Ripple & Noise <sup>(1)</sup>		Max. Power
PMP66N1-12		12.0 V	0 A	5.42 A	±5%	120 mV	65 W	88 / 89%
PMP66N1-13-2		19.0 V	0 A	3.43 A	±5%	190 mV	65 W	89 / 89%
PMP66N1-14		24.0 V	0 A	2.70 A	±5%	240 mV	65 W	88 / 89%

**NOTES:**

- Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 47 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

## MECHANICAL SPECIFICATIONS



**NOTES:**

- Dimensions shown in inches [mm]
- Tolerance 0.02 [0.5] maximum
- Weight: 280 grams (0.617 lbs.) approx.

## OUTPUT POWER DERATING CURVE

