

## DESCRIPTION

The PMP15M series of AC / DC wall mount switching power supplies are for 15 watts of continuous output power. They are enclosed in a 94V-1 rated polyphenylene-oxide case with four types of replaceable AC plugs: European plug, UK plug, North American plug and Australian plug. All models meet CISPR 11 and FCC class B emission limits, and are designed for medical application, not for life-supporting equipment.

Note: Warranty period for PMP15M series is two years.

## FEATURES

- Replaceable AC plugs
- High efficiency
- Low ripple & noise
- Overvoltage protection
- Short-circuit protection
- 100% burn-in at full rated load
- Standby consumption less than 0.3 W
- Compliant with CEC and ENERGY STAR efficiency level IV requirements
- Compliant with RoHS requirements

## INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	0.5A (rms) for 115 VAC 0.3A (rms) for 230 VAC
Enclosure leakage current (Touch current):	100 uA max. @ 264 VAC, 60 Hz

## OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart.
Total output power:	See rating chart.
Ripple and noise:	1% peak to peak maximum (70 mVp-p max. for PMP15M-10)
Overvoltage protection:	Set at 125% to 230% 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:	+10% maximum excursion
	Output load step is:
	(1) 0% to 50%
	(2) 50% to 100%
	Slew rate = 0.5 A/uS
	Frequency is 100 Hz and 1 KHz

## 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 90% non-condensing

## PMP15M SERIES



**CE** (LVD)  
RoHS

## SAFETY STANDARD APPROVALS



UL 60601-1, CSA C22.2 No. 60601.1



TUV EN60601-1

## GENERAL SPECIFICATIONS

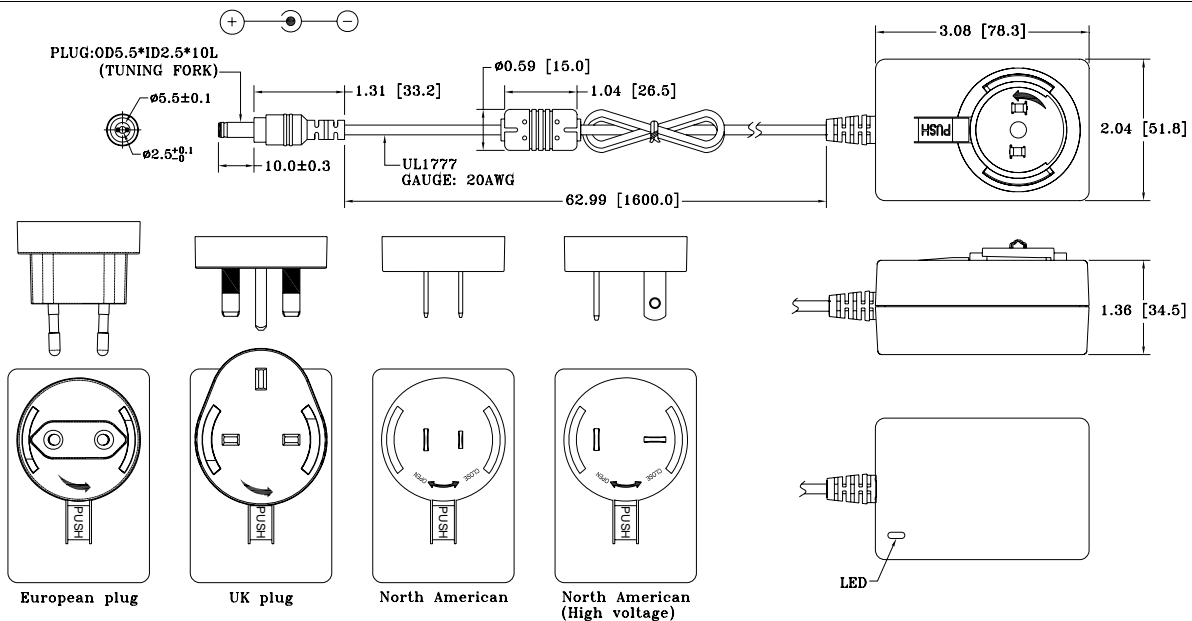
Efficiency:	76.5% to 80% min. at 115 VAC or 230 VAC
Hold-up time:	8 msec minimum at 115 VAC
Line regulation:	$\pm 0.5\%$ maximum at full load
Inrush current:	No damage
Withstand voltage:	4000 VAC from input to output
MTBF:	300,000 hours at full load at 25 $^{\circ}\text{C}$ ambient, calculated per MIL-HDBK-217F
EMC Performance(IEC60601-1-2)	
EN55011:	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, $\pm 8$ KV air and $\pm 6$ KV contact
EN61000-4-3:	Radiated immunity, 3 V/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, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 3 A/m
EN61000-4-11:	Voltage dips, 30% reduction for 500 ms 60% reduction for 100 ms > 95% reduction for 10 ms

## OUTPUT VOLTAGE/CURRENT RATING CHART

MODEL(1)(2)	Vnom.	Output			Maximum Output Power
		I <sub>max.</sub>	I <sub>min.</sub>	Tol.	
PMP15M-10	5 V	3.0 A	0 A	5%	15 W
PMP15M-10-1	6 V	2.5 A	0 A	5%	15 W
PMP15M-11	9 V	1.67 A	0 A	5%	15 W
PMP15M-12	12 V	1.25 A	0 A	5%	15 W
PMP15M-13	15 V	1.0 A	0 A	5%	15 W
PMP15M-14	24 V	0.625 A	0 A	5%	15 W
PMP15D-10	5 V	3.0 A	0 A	5%	15 W
PMP15D-12	12 V	1.25 A	0 A	5%	15 W
PMP15D-14	24 V	0.625 A	0 A	5%	15 W
PMP15E-10	5 V	3.0 A	0 A	5%	15 W
PMP15E-12	12 V	1.25 A	0 A	5%	15 W
PMP15E-14	24 V	0.625 A	0 A	5%	15 W

- NOTES:
1. Ripple and noise: Peak to peak with 20 MHz bandwidth and 47 uF tantalum capacitor in parallel with a 0.1 uF ceramic capacitor at rated line voltage and load ranges.
  2. Plug option: PMP15M with replaceable AC plug, PMP15D with North American AC plug, PMP15E with European AC plug.

## MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions shown in inches [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 200 grams (0.44 lbs.) approx
4. The length of output cable for PMP15M (D, E)-10 & PMP15M-10-1 is 39.37 (1000.0), 16 AWG
5. The length of output cable for PMP15M-11 is 47.24 (1200.0), 18 AWG