

DESCRIPTION

The PMP30 series of AC/DC wall mount switching power supplies are for 20-30 watts of continuous output power. They are enclosed in a 94V-0 rated polycarbonate case. The PMP30M models are shipped with a selected interchangeable AC plug, and additional types of AC plug can be purchased from the factory. All models meet EN55011 and FCC class B emission limits, and are designed for medical applications.

FEATURES

- Operation altitude up to 5000 meters
- BF class insulation
- Interchangeable AC plugs for PMP30M models
- Meet IP22 (except PMP30M models)
- Overvoltage protection
- Over temperature protection
- Short-circuit protection
- 100% burn-in at full rated load
- Compliant with DoE efficiency level VI requirements
- Compliant with RoHS requirements

INPUT SPECIFICATIONS

Input voltage:	80-264 VAC
Input frequency:	47-63 Hz
Input current:	1.0 A (rms) for 115 VAC, 0.6 A (rms) for 230 VAC
Touch current:	100 µA max. @ 264 VAC, 63 Hz

OUTPUT SPECIFICATIONS

Output voltage /current:	See rating chart.
Maximum output power:	See rating chart.
Ripple and noise:	See rating chart
Over voltage protection:	Set at 112% to 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:	±0.04% /°C maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 µs after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	-20°C to +60°C
Storage temperature:	-40°C to +85°C
Relative humidity:	10% to 90% non-condensing
Temperature derating:	Derate from 100% at +40°C linearly to 50% at +60°C

PMP30 SERIES



SAFETY STANDARD APPROVALS



UL ES 60601-1, CSA C22.2 No. 60601-1
File No. E178020



TÜV EN 60601-1

GENERAL SPECIFICATIONS

Hold-up time:	8 ms minimum at 115 VAC
Turn on delay time:	3 s maximum at 115 VAC
Efficiency:	Compliant with DoE efficiency level VI requirements (see rating chart)
Line regulation:	±1% maximum at full load
Inrush current:	60 A @ 115 VAC or 120 A @ 230 VAC at 25°C cold start
Withstand voltage:	4000 VAC from input to output
MTBF:	300,000 hours at full load at 25°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 and D
EN61000-3-3:	Line flicker
EN60601-1-2	
EN61000-4-2:	ESD, ±15 KV air and ±8 KV contact
EN61000-4-3:	Radiated immunity, 9-28 V/m
EN61000-4-4:	Fast transient/burst, ±2 KV
EN61000-4-5:	Surge, ±1 KV diff.
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, and >95% reduction for 10 ms

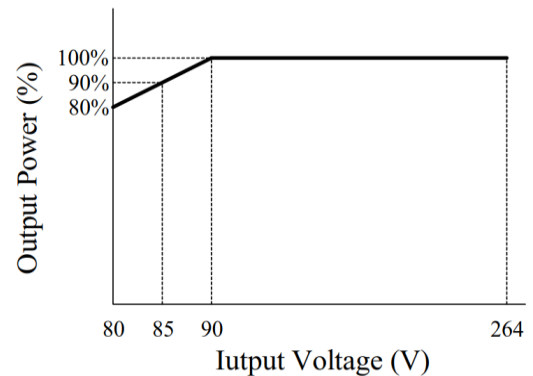
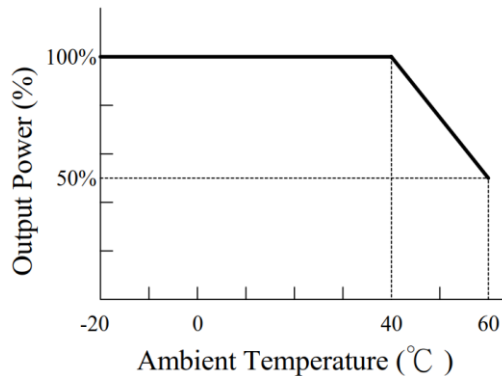
OUTPUT VOLTAGE/CURRENT RATING CHART

Model ⁽¹⁾			Output					Average Active Efficiency (typical) @ 115 / 230 Vac
			V1	Min. Current	Max. Current	Tol.	Ripple & Noise ⁽²⁾	
PMP30M-10-A	PMP30NP-10	PMP30E-10	5 V	0 A	4.00 A	±5%	100 mV	83.5 / 83.5%
PMP30M-10-2-A	PMP30NP-10-2	PMP30E-10-2	7.5 V	0 A	3.00 A	±5%	100 mV	86.0 / 86.0%
PMP30M-11-A	PMP30NP-11	PMP30E-11	9 V	0 A	3.00 A	±5%	100 mV	87.0 / 87.0%
PMP30M-11-1-A	PMP30NP-11-1	PMP30E-11-1	10 V	0 A	2.70 A	±5%	100 mV	87.0 / 87.0%
PMP30M-12-A	PMP30NP-12	PMP30E-12	12 V	0 A	2.50 A	±5%	120 mV	87.5 / 87.5%
PMP30M-13-A	PMP30NP-13	PMP30E-13	15 V	0 A	2.00 A	±5%	150 mV	87.5 / 87.5%
PMP30M-13-1-A	PMP30NP-13-1	PMP30E-13-1	18 V	0 A	1.67 A	±5%	180 mV	87.5 / 87.5%
PMP30M-14-A	PMP30NP-14	PMP30E-14	24 V	0 A	1.25 A	±5%	240 mV	87.5 / 87.5%
PMP30M-16-A	PMP30NP-16	PMP30E-16	30 V	0 A	1.00 A	±5%	300 mV	87.5 / 87.5%
PMP30M-18-A	PMP30NP-18	PMP30E-18	48 V	0 A	0.63 A	±5%	480 mV	87.5 / 87.5%

NOTES:

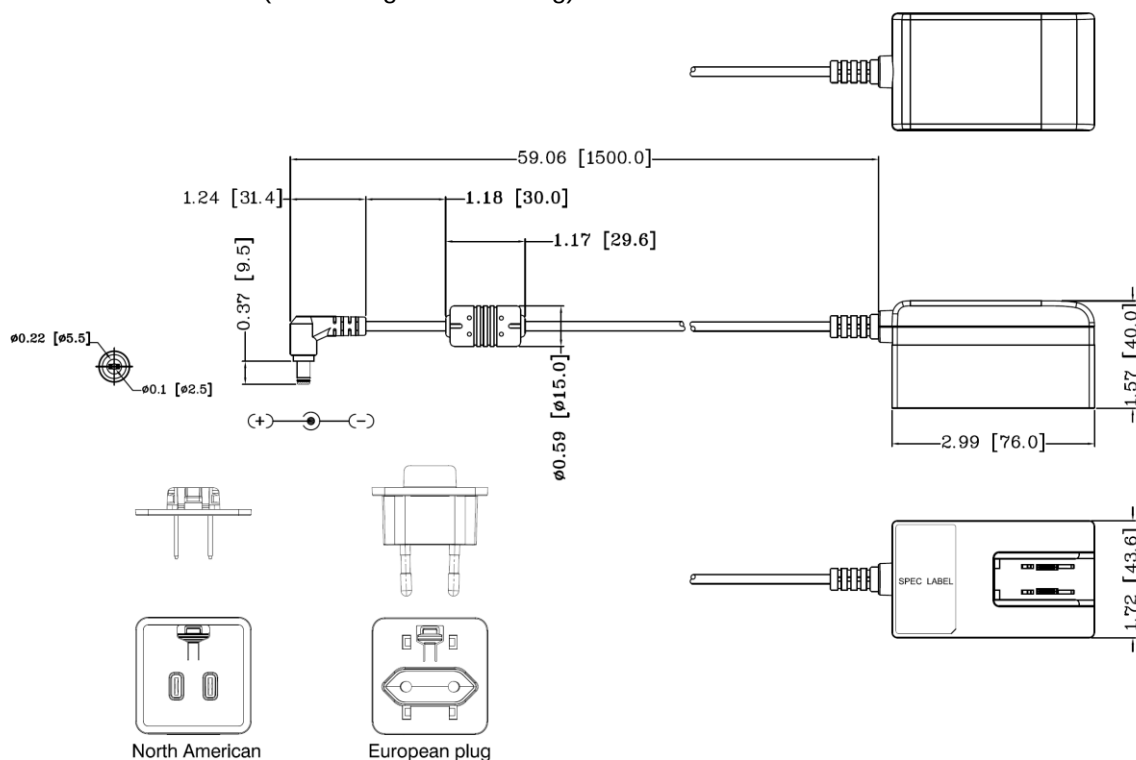
- PMP30M models are equipped with an interchangeable AC plug, one of the 4 available types shown in note #5 in Mechanical Specifications below. PMP30M-1X-A models are shipped with North American plug, PMP30M-1X-C models with European plug, and so on, while PMP30M-1X-P designated models are shipped with 4 available plugs, one attached and the rest enclosed.
- PMP30NP models are with fixed North American AC plug, and PMP30E models with European plug.
- 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.

OUTPUT POWER DERATING CURVE

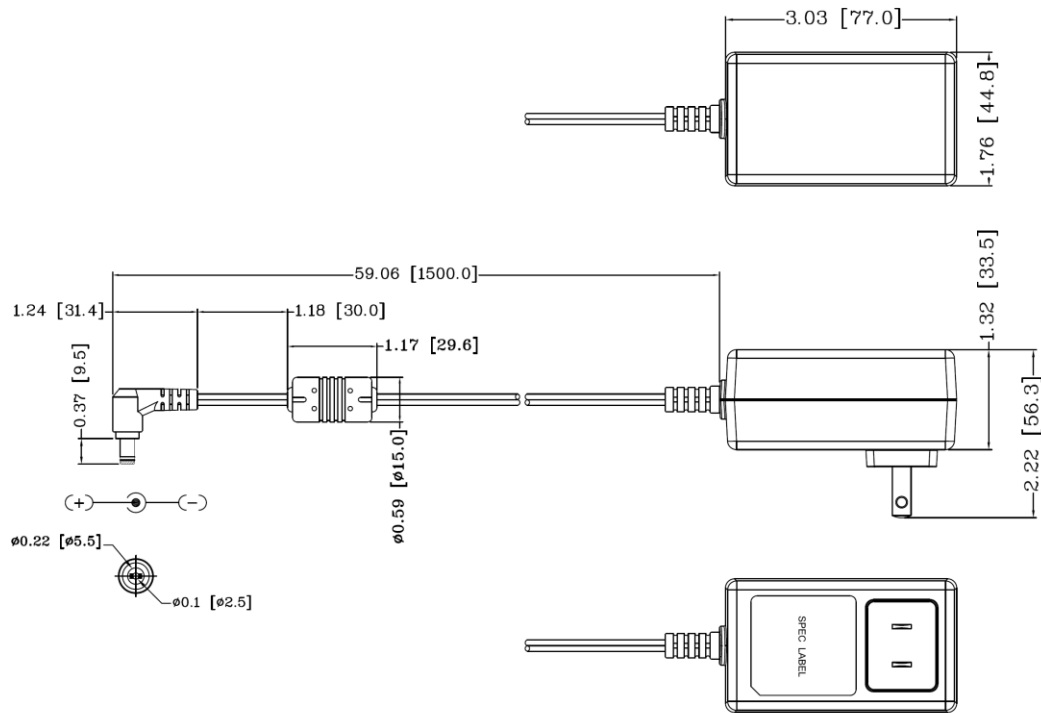


MECHANICAL SPECIFICATIONS

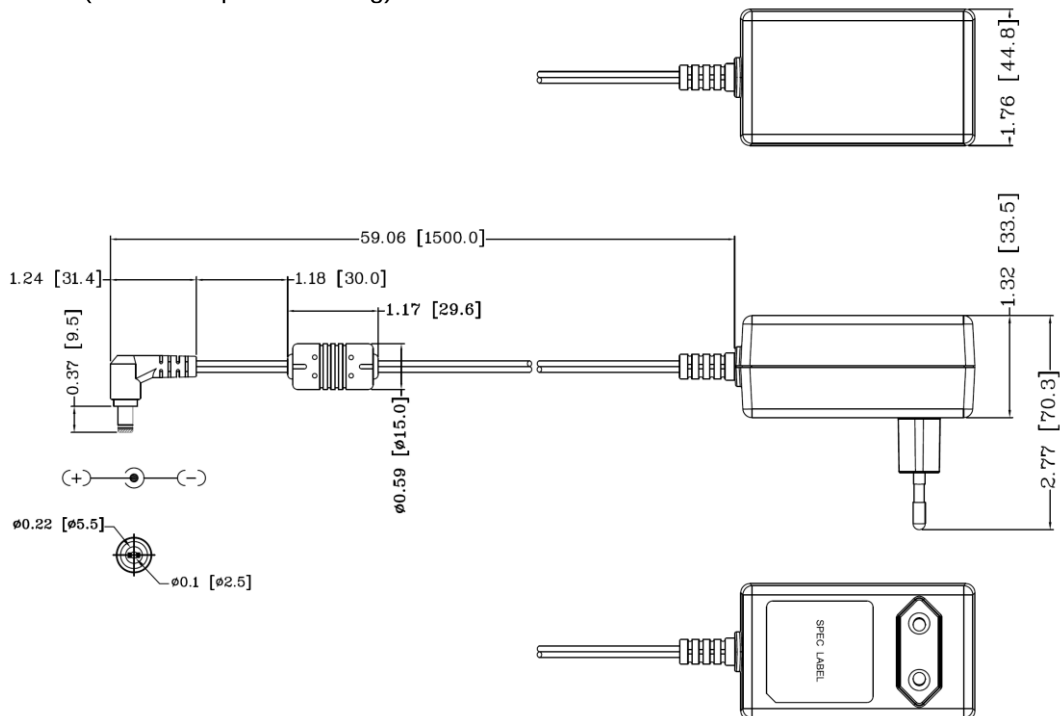
1. PMP30M models (Interchangeable AC Plug)



2. PMP30NP models (Fixed North American AC Plug, Non-Polarization)



3. PMP30E models (Fixed European AC Plug)



NOTES:

1. Dimensions shown in inches [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 168 grams (0.37 lbs.) approx.
4. Output connector is 5.5 mm O.D., 2.5 mm I.D., 9.5 mm long barrel female 90° connector, center positive voltage.
5. Interchangeable AC plugs can be ordered by referring to the following ordering numbers:

Type	Type A North American plug	Type C European plug	Type G UK plug	Type I Australian plug
Ordering No.	5OE00036	5OE00086	5OE00063	5OE00065
Safety Approval	cULus approved	TÜV approved	None	None