

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.

PMP30 SERIES

RoHS



FEATURES

- Operation altitude up to 5000 meters
- BF class insulation
- Interchangeable AC plugs for PMP30M models
- Compliant with EN/ES 60601-1-11 for home healthcare medical devices
- 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
- IEC 60601-1-2 4th Edition EMC Compliant

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 μ A 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
Overvoltage protection:	Set at 108% to 170% of its nominal output voltage
Overcurrent protection:	Protected to short circuit conditions
Temperature coefficient:	$\pm 0.04\%$ / \square maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 μ s after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

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

SAFETY STANDARD APPROVALS

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:	$\pm 1\%$ 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
Ingress Protection:	IP22 Compliant

EMC Performance (IEC 60601-1-2)

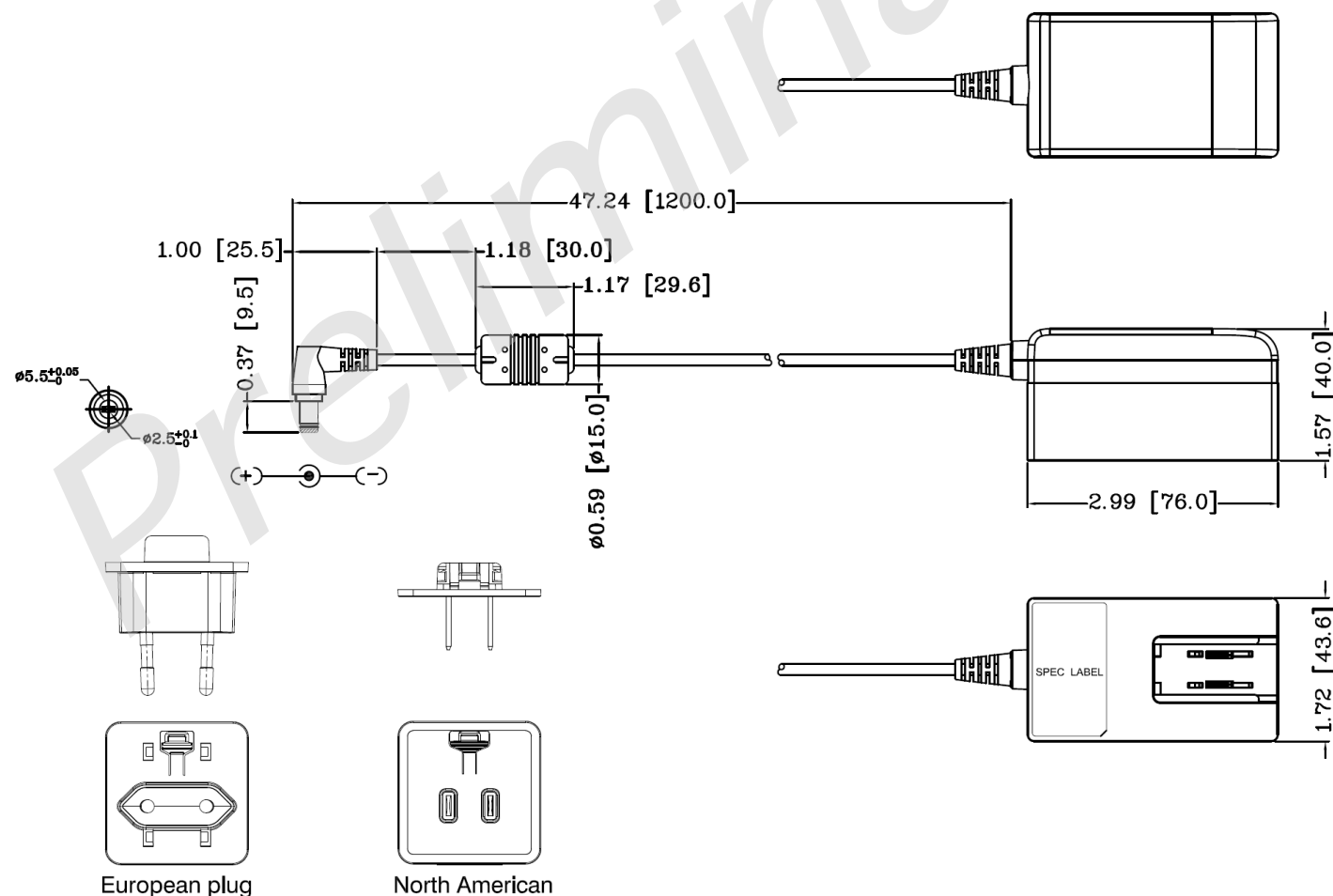
EN55011	Class B conducted, Class B radiated
FCC:	Class B conducted, Class B radiated
VCCI:	Class B conducted, Class B radiated
EN61000-3-2:	Harmonic distortion, Class A and D
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, ± 15 KV air and ± 8 KV contact
EN61000-4-3:	Radiated immunity, 10 V/m
EN61000-4-4:	Fast transient/burst, ± 2 KV
EN61000-4-5:	Surge, ± 1 KV diff., ± 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, and >95% reduction for 10 ms

PMP30 MEDICAL SERIES

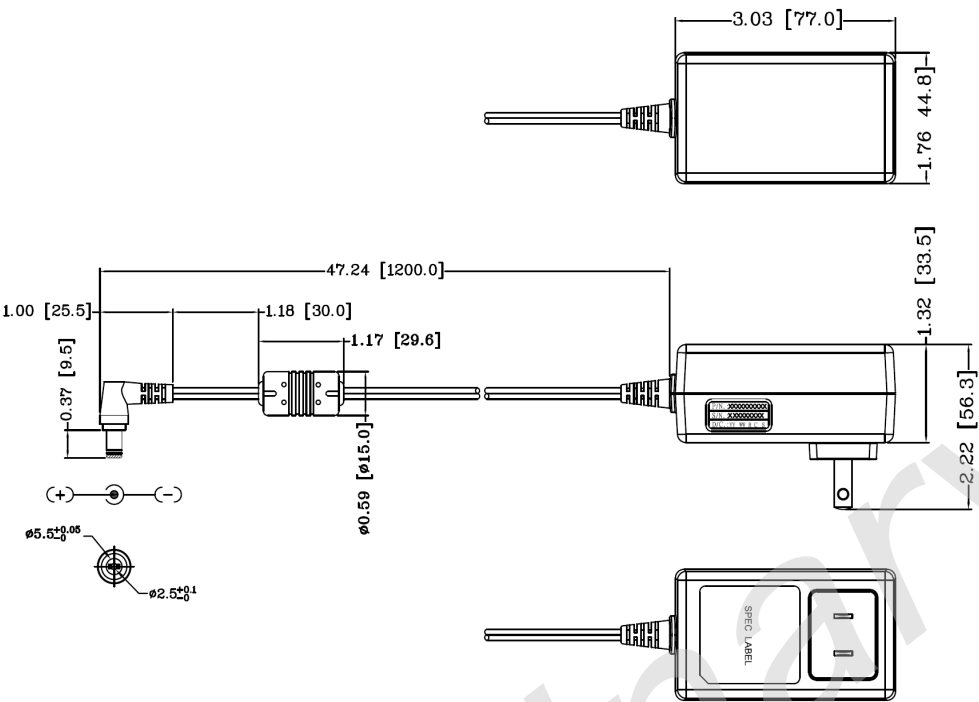
Model ⁽¹⁾			Output						Average Active Efficiency (typical) @ 115 / 230 Vac
			V1	Min. Current	Max. Current	Tol.	Ripple & Noise ⁽²⁾	Max. Output Power	
PMP30M-10	PMP30NP-10	PMP30E-10	5 V	0 A	4.00 A	±5%	75 mV	20 W	83.5 / 83.5%
PMP30M-11	PMP30NP-11	PMP30E-11	9 V	0 A	3.00 A	±5%	90 mV	27 W	87.0 / 87.0%
PMP30M-11-1	PMP30NP-11-1	PMP30E-11-1	10 V	0 A	2.70 A	±5%	100 mV	27 W	87.0 / 87.0%
PMP30M-12	PMP30NP-12	PMP30E-12	12 V	0 A	2.50 A	±5%	120 mV	30 W	87.5 / 87.5%
PMP30M-13	PMP30NP-13	PMP30E-13	15 V	0 A	2.00 A	±5%	150 mV	30 W	87.5 / 87.5%
PMP30M-13-1	PMP30NP-13-1	PMP30E-13-1	18 V	0 A	1.67 A	±5%	180 mV	30 W	87.5 / 87.5%
PMP30M-14	PMP30NP-14	PMP30E-14	24 V	0 A	1.25 A	±5%	240 mV	30 W	87.5 / 87.5%
PMP30M-16	PMP30NP-16	PMP30E-16	30 V	0 A	1.00 A	±5%	300 mV	30 W	87.5 / 87.5%
PMP30M-18	PMP30NP-18	PMP30E-18	48 V	0 A	0.63 A	±5%	480 mV	30 W	87.5 / 87.5%

1. PMP30M models are for interchangeable AC plugs which are to be ordered separately by referring available types to note #5 in mechanical specifications below. PMP30NP models are with fixed North American AC plug for safety approval cULus only, and PMP30E models with fixed European AC plug for safety approval TÜV only.
2. 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 μ F tantalum capacitor in parallel with a 0.1 μ F ceramic capacitor across the output.

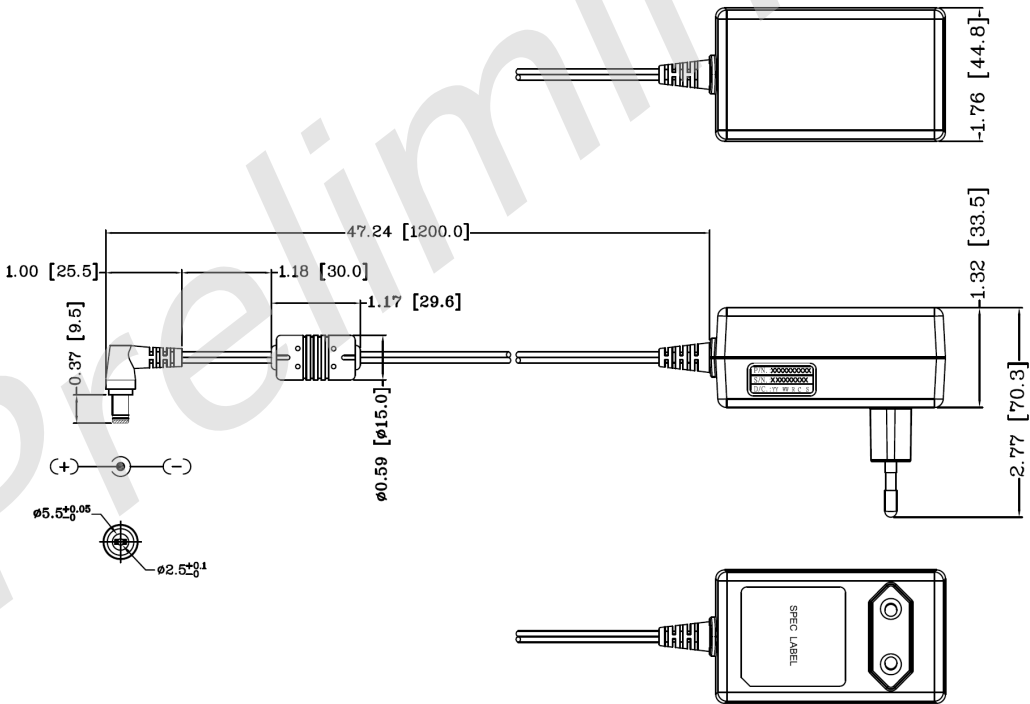
- 100



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. The length of output cable for PMP30XX-10, PMP30XX-11 and PMP30XX-11-1 is 37.4 (950)
- 6. Interchangeable AC plugs can be ordered by referring to the following ordering numbers:

Type	European plug	US plug (non-polarization)	UK plug	Australia plug	Korea plug	Argentina plug
Ordering no.	5OE00021	5OE00022	5OE00004	5OE00002	5OE00026	5OE00020