



25-30 WATT MEDICAL SWITCHING POWER SUPPLIES

DESCRIPTION

The PMP30 series of AC/DC switching power supplies are for 25 to 30 watts of continuous output power. They are enclosed in a 94V-1 rated polyphenylene-oxide case with an IEC320 inlet to mate with interchangeable cord for world-wide use. All models meet CISPR 11 and FCC class B emission limits, and are designed for medical applications, not for life support equipment.

FEATURES

- 10 standard desktop models.
- Optional output connectors
- Optional on/off switch
- 100% burn-in at full rated load
- Input surge current protection
- Overvoltage protection
- Overcurrent protection
- Short-circuit protection with auto-recovery
- Compliant with RoHS requirements

INPUT SPECIFICATIONS

Input voltage : 85 to 264VAC
 Input frequency: 47 to 63Hz
 Input current : 0.80A (rms) for 115VAC
 0.50A (rms) for 230VAC
 Earth leakage Current: 90uA max. @ 115VAC, 60Hz
 150uA max. @230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current : See rating chart
 Output power range : 30 watts maximum
 Ripple and noise : 1% peak to peak maximum
 Overvoltage protection : Set at 112-132% of the higher extreme of its nominal output voltage
 Overcurrent protection : The output is 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 $^{\circ}\text{C}$ to +70 $^{\circ}\text{C}$
 Storage temperature: -40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$
 Relative humidity: 5% to 95% non-condensing
 Derating: Derate from 100% at +50 $^{\circ}\text{C}$ linearly to 50% at +70 $^{\circ}\text{C}$

PMP30 SERIES

CE (LVD)
RoHS



Safety Standard Approvals:



UL 2601-1, CSA C22.2 No. 601.1
File No. E178020



TÜV EN60601-1
Certificate No. T2054090

GENERAL SPECIFICATIONS

Switching frequency : 70KHz $\pm 5\text{KHz}$
 Efficiency : 70% minimum on all models with output voltage $\geq 7\text{V}$ or 65% minimum on the others
 Hold-up time: 20ms minimum at 115VAC
 Line regulation: $\pm 0.5\%$ maximum at full load
 Inrush current: 15 amps @ 115VAC or 30 amps @ 230VAC at 25 $^{\circ}\text{C}$ cold start
 Withstand voltage: 4000VAC from input to output
 1500VAC from input to ground
 500VAC from output to ground
 MTBF: 400,000hours minimum at full load at 25 $^{\circ}\text{C}$ ambient, calculated per MIL-HDBK-217F
 EMC Performance (EN60601-1-2: 2001)
 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, $\pm 8\text{KV}$ air and $\pm 6\text{KV}$ contact
 EN61000-4-3: Radiated immunity, 3V/m for 80~2500MHz
 EN61000-4-4: Fast transient/burst, $\pm 2\text{KV}$
 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, 3A/m
 EN61000-4-11: Voltage dips, 30% reduction for 500ms, 60% reduction for 100ms and >95% reduction for 10ms

UNIVERSAL INPUT

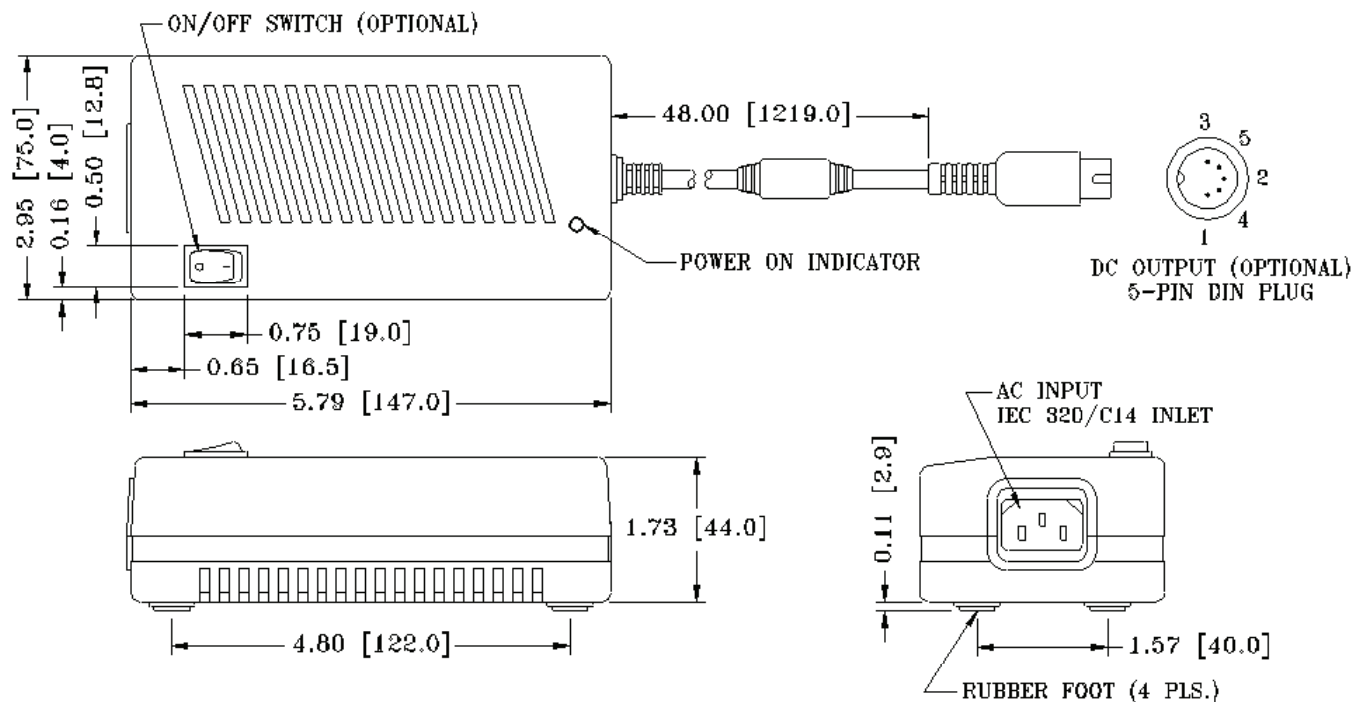
PMP30 SERIES

OUTPUT VOLTAGE/CURRENT RATING CHART

MODEL	Vnom.	Imin.	Output Imax.	Tol.	Maximum Output Power
PMP30-10	5-6V	0A	5.0A	5%	25W
PMP30-10-1	6-8V	0A	4.5A	5%	30W
PMP30-11	9-11V	0A	3.4A	2%	30W
PMP30-12	11-13V	0A	2.8A	2%	30W
PMP30-13	13-17V	0A	2.4A	2%	30W
PMP30-13-1	17-21V	0A	1.8A	2%	30W
PMP30-14	21-27V	0A	1.5A	2%	30W
PMP30-16	27-33V	0A	1.2A	2%	30W
PMP30-17	33-39V	0A	1.0A	2%	30W
PMP30-18	48V	0A	0.7A	2%	30W

NOTE: The output voltage can be adjusted by user in the stated range, or set by factory to a wanted value in the range upon the request of a user when ordering.

MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions shown in inch [mm]
2. Tolerance 0.02[0.5] maximum
3. Weight: 0.55 kgs. (1.21lbs.) approx.
4. See [pages 6-1 to 6-8](#) for optional output connectors. Add the suffix assigned for a selected connector to a wanted model number, e.g. PMP30-12-B1, for ordering.

PIN CHART

MODEL	PIN	1	2	3	4	5
PMP30-10	PMP30-10-1	RETURN	RETURN	OUTPUT	RETURN	OUTPUT
PMP30-11	PMP30-12					
PMP30-13	PMP30-13-1					
PMP30-14	PMP30-16					
PMP30-17	PMP30-18					