



100-130 WATT MEDICAL SWITCHING POWER

DESCRIPTION

The PMP130 series of AC/DC switching power supplies are for 100 to 130 watts of continuous output power, specially designed for medical applications not for patient contact. They are enclosed in a 94V-1 rated polyphenylene-oxide case with an IEC 320 inlet to mate with interchangeable cord for world-wide use. An on/off switch can be added at request. All models meet CISPR 11 and FCC class B emission limits, and comply with UL, CSA, IEC and CE requirements.

FEATURES

- In compliance with EN61000-3-2, EN61000-3-3 and EN61000-1-1-2
- Optional output connectors
- Optional on/off switch
- Optional Power Fail Detect (PFD) signal
- 100% burn-in at full load
- Auto-ranging input
- Input surge current protection
- Overvoltage protection
- Thermal protection

INPUT SPECIFICATIONS

Input voltage : 90 to 132VAC or 180 to 264VAC (auto-ranging)
Input frequency : 47 to 63 Hz
Input current : 3.0A (rms) for 115 VAC
 1.7A (rms) for 230VAC
Leakage current : 90uA max. @ 115VAC, 60Hz
 150uA max. @ 230VAC, 50Hz

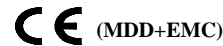
OUTPUT SPECIFICATIONS

Output voltage/current : See rating chart
Total output power : 130 watts maximum
Ripple and noise : 1% peak to peak maximum
Overvoltage protection : Provided on output: set at 112 - 132% of its nominal output voltage
Overcurrent protection : All outputs 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 $^{\circ}\text{C}$

PMP130 SERIES



Safety Standard Approvals :



UL 2601-1
CSA C22.2 No. 601.1



TÜV EN60601-1

GENERAL SPECIFICATIONS

Switching frequency : 68 KHz \pm 8KHz
Efficiency : 70% minimum on Vo \geq 12V
 65% minimum on others
Hold-up time : 10 msec minimum at 115VAC
Line regulation : $\pm 0.5\%$ maximum at full load
Inrush current : 15amps @115VAC, or 30amps @230VAC, at 25 $^{\circ}\text{C}$ and cold start
Withstand voltage : 4000VAC from input to output
 1500VAC from input to ground
 5000VAC from output to ground
MTBF : 400,000 hours minimum at full load at 25 $^{\circ}\text{C}$ ambient, calculated per MIL-HDBK-217F, excluding DC fan.

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
EN61000-3-3: Line flicker
EN61000-4-2: ESD, \pm 8KV air and \pm 6KV contact
EN61000-4-3: Radiated immunity, 3V/m for 80~2500MHz
EN61000-4-4: Fast transient/burst, \pm 2KV
EN61000-4-5: Surge, \pm 1KV diff., \pm 2KV 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

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AUTORANGING INPUT PMP130 MEDICAL SERIES

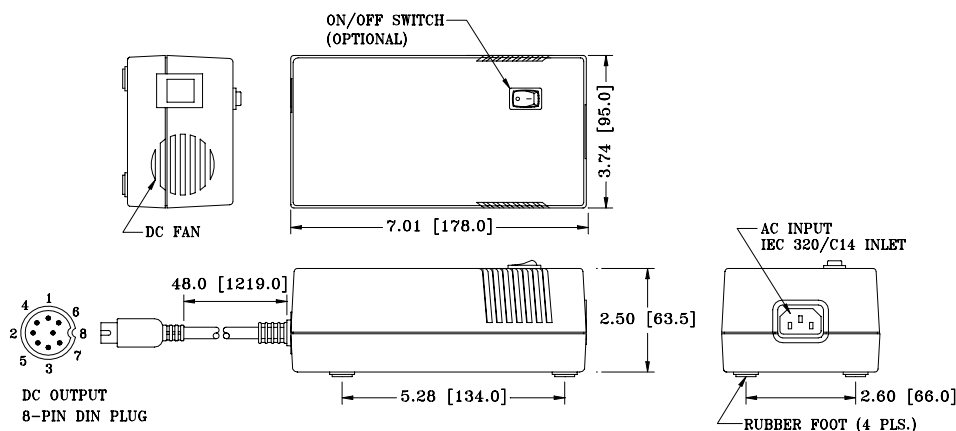
OUTPUT VOLTAGE/CURRENT RATING CHART

(1)(2) Model	Vnom.	Output Imin.	Imax.	Tol.	Maximum Output Power
PMP130-10	5V	0A	20A	5%	100W
PMP130-10-1	7V	0A	14A	5%	100W
PMP130-11	10V	0A	10A	5%	100W
PM130-12	12V	0A	10.8A	5%	130W
PMP130-13	15V	0A	8.6A	4%	130W
PMP130-13-1	18V	0A	7.2A	4%	130W
PMP130-14	24V	0A	5.4A	3%	130W
PMP130-16	30V	0A	4.3A	3%	130W
PMP130-17	36V	0A	3.6A	2%	130W
PMP130-18	48V	0A	2.7A	2%	130W

Notes: (1) All models are with built-in fan.

(2) Models except PMP130-10, PMP130-10-1 and PMP130-11 are without remote sense. Consult factory for applications requiring remote sense.

MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions shown in inch [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 0.80Kgs (1.76Lbs.) approx.
4. See pages 6-19 to 6-26 for optional output connectors. Add the suffix assigned for a selected connector to a wanted model number, e.g. PMP130-14-HA, for ordering.
5. To order a model with on/off switch, add suffix "S" to the model number, e.g. PMP130-14-HA-S.

PIN CHART

MODEL \ PIN		1	2	3	4	5	6	7	8
PMP130-10	PMP130-10-1	RETURN	-SENSE	OUTPUT +V	RETURN	OUTPUT +V	RETURN	OUTPUT +V	+SENSE
PMP130-11									
PMP130-12	PMP130-13	RETURN	RETURN	OUTPUT +V	RETURN	OUTPUT +V	RETURN	OUTPUT +V	OUTPUT +V
PMP130-13-1	PKP130-14								
PMP130-16	PMP130-17								
PMP130-18									