PMP110 Series

110 WATTS MULTIPLE OUTPUT AC/DC MEDICAL

Features

- **In compliance with EN61000-3-2, EN61000-3-3 and EN61000-1-1-2.**
- **Thermal protection.**
- **Overvoltage protection.**
- **Overcurrent protection.**
- **100% burn-in at full rated load.**



Specifications

INPUT

Input Voltage	90-132/180-264Vac
Frequency	47Hz–67Hz
Input Current	3.2A (rms) for 115Vac. 1.8A (rms) for 230Vac.
Leakage current	90µA max. @ 115Vac. 60Hz. 150µA max. @ 230Vac. 50Hz.
Insulation	Input – Output: 4000VAC Input – Ground: 1500VAC Output – Ground: 500VAC
Inrush Current	15A @ 115V, 30A @ 230V

OUTPUT

Output Voltage	See table
Output Current	See table
Ripple & Noise	1% peak to peak
Line Regulation	±0.2% maximum at full load.
Load Regulation	See table
Transient Response	Max. deviation 4% recovering to 1% within 500µs after 25% load charge
Overvoltage Protection	Provided on V1 only. Set at 110%–132% of nominal.
Overcurrent Protection	All outputs protected for short circuit conditions
Temperature Coefficient	All outputs ±0.04% per °C.
Holdup Time	Typically 12ms at 110VAC.
PFD Signal (Optional)	Power fail detection signal. TTL logic low upon loss of input power.

OPERATING

MTBF	550,000 hrs @ 25°C
Efficiency	65-70% minimum.

ENVIRONMENTAL

Operating Temperature	0°C to 70°C
Derating	Derate to 50% at 70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5%–95% non-condensing

STANDARDS AND APPROVALS

Safety standards	UL2601-1, CSA C22.2, TUV EN60601-1
C-Tick	AS/NZS CISPR11 Group 1, Class A
EMC standards	EN60601-1-2: 2001,EN61000-3-2, -3, EN61000-4-2, -3, -4, -5, -6, -8, -11
EMI standards	EN55011 Class B, FCC Class B, VCCI Class B
MEPS compliance	TBC

MECHANICAL

Dimensions	254x127x68.58mm
Weight	1.4kgs approx.

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Selection Table

MODEL	OUTPUT #1				OUTPUT #2					OUTPUT #3				OUTPUT #4				MAX. OUTPUT
NUMBER	VNOM	IMIN	IMAX	TOL	VNOM	IMIN	IMAX	IPEAK	TOL	VNOM	IMIN	IMAX	TOL	VNOM	IMIN	IMAX	TOL	POWER
PMP110-23	+5V	0.8A	10A	5%	+12V	0A	5A	9.0A	5%		(N/A)				(N/A)			110W
PMP110-31	+5V	0.8A	10A	5%	+12V	0A	5A	9.0A	5%	-12V	0A	2A	5%		(N/A)			110W
PMP110-32	+5V	0.8A	10A	5%	+15V	0A	4A	7.5A	5%	-15V	0A	2A	5%		(N/A)			110W
PMP110-40	+5V	0.8A	10A	5%	+12V	0A	5A	9.0A	5%	-12V	0A	2A	5%	-5V	0A	2A	5%	110W
PMP110-41	+5V	0.8A	10A	5%	+15V	0A	4A	7.5A	5%	-15V	0A	2A	5%	+24V	0A	2A	5%	110W
PMP110-42	+5V	0.8A	10A	5%	+12V	0A	5A	9.0A	5%	-12V	0A	2A	5%	+12V	0A	2A	5%	110W
PMP110-45	+5V	0.8A	10A	5%	+12V	0A	5A	9.0A	5%	-12V	0A	2A	5%	+24V	0A	2A	5%	110W
PMP110-45-1	+5V	2A	10A	5%	+12V	0A	5A	9.0A	5%	-12V	0A	2A	5%	+24V	1.5A	3A	10%	110W
PMP110-45-2	+5V	0.8A	10A	5%	+24V	0A	3A	5.0A	5%	-12V	0A	2A	5%	+12V	0A	2A	5%	110W
PMP110-46	+5V	0.8A	10A	5%	+15V	0A	4A	7.5A	5%	-15V	0A	2A	5%	-5V	0A	2A	5%	110W

NOTES: (1) Peak output current with 10% maximum duty cycle for less than 60 seconds. Total peak power must not exceed 130 watts.
(2) The output 1 of model PMP110-45-1 needs a minimum current of 2A to support the other outputs at their maximum rated loads.

Pin Chart

MODEL/PIN		1	2	3	4	5	6	7	8
PMP110-23		Common Return	N.C.	Output 1	N.C.	Output 2	Common Return	Output 1	N.C. or PFD
PMP110-31	PMP130-32	Common Return	Output 3	Output 1	N.C.	Output 2	Common Return	Output 1	N.C. or PFD
PMP130-40 PMP130-41 PMP130-45	PMP130-45-1 PMP130-45-2 PMP130-46	Common Return	Output 3	Output 1	Output 4	Output 2	Common Return	Output 1	N.C. or PFD

Technical Illustration

