

Medical Switching Power Supply

XPiQ inc.

Intelligent Design Quality Product



55 Watts
PMP55 Series



CE Marked - LVD & EMC

•
Universal Input

•
100% Burn-In

•
Low Leakage Current

•
4000 VAC Isolation

•
Input Surge Protection

•
Line & Neutral Fused

Specification

All specifications typical at nominal line, full load and 25°C

Input

- *Input Voltage* 85-264 VAC
- *Input Frequency* 47 to 440 Hz
- *Input Current* 1.50A (rms) for 115 VAC
0.90A (rms) for 230 VAC
- *Safety Ground Leakage Current* 50µA max. at 110 VAC 60 Hz
100µA max. at 240 VAC 50 Hz

Output

- *Total Output Power* 0-55 watts
- *Ripple and Noise* 1% peak to peak max.
- *Overvoltage Protection* Provided on output #1 only set at 112-132% of its nominal output voltage
- *Overcurrent Protection:* All outputs protected to short circuit conditions
- *Temperature Coefficient:* All outputs ±0.04%/°C maximum
- *Transient Response* Maximum excursion of 4% or better on all models. Recovers to 1% of final value within 500µs after a 25% step load change

General

- *Efficiency* 70% minimum, single outputs
65% minimum, all other models
- *Hold-up time* 10 msec minimum at 115 VAC
- *Line Regulation* ±0.5% maximum at full load
- *Inrush Current* 15 amps at 115 VAC or
30 amps at 230 VAC at 25°C cold start
- *Withstand Voltage* 4000 VAC from input to output
1500 VAC from input to ground
500 VAC from output to ground

Environmental

- *Operating Temperature* 0°C to +70°C*
- *Storage Temperature* -40°C to +85°C
- *Relative Humidity* 5% to 95% non-condensing
- *MTBF* 100,000 hours minimum at full load at 25°C ambient
- *EMI Requirement* Meets conducted and radiated limits of EN 55011 (CISPR11) Class B
- *Safety Requirements* Approved to: (not for patient contact)
a) UL 2601
b) CSA C22.2 No. 601.1-M90 per CUL
c) IEC 601-1/EN60601-1

* Derate linearly from 100% load at 50°C to 50% load at 70°C

OUTPUT VOLTAGE & CURRENT RATINGS PMP 55

Model	Output #1				Output #2				Output #3				Maximum Output Power
	Vnom	Imin	I _{max}	Tol.	Vnom	Imin	I _{max}	Tol.	Vnom	Imin	I _{max}	Tol.	
PMP55-10	5V	0A	8.0A	5%									40W
PMP55-10-1	7V	0A	7.5A	5%									45W
PMP55-11	10V	0A	5.0A	5%									50W
PMP55-12	12V	0A	4.6A	5%									55W
PMP55-13	15V	0A	3.7A	3%									55W
PMP55-13-1	18V	0A	3.1A	3%									55W
PMP55-14	24V	0A	2.3A	3%									55W
PMP55-16	30V	0A	1.9A	3%									55W
PMP55-17	36V	0A	1.6A	3%									55W
PMP55-18	48V	0A	1.2A	3%									55W
PMP55-23	+5V	1A	5.0A	5%	+12V	0.5A	3.0A	5%					45W
PMP55-24	+5V	1A	5.0A	5%	+15V	0.4A	2.5A	5%					45W
PMP55-25	+5V	1A	5.0A	5%	+24V	0.3A	2.0A	5%					45W
PMP55-31	+5V	1A	5.0A	5%	+12V	0.5A	3.0A	5%	-12V	0.1A	0.5A	10%	45W
PMP55-32	+5V	1A	5.0A	5%	+15V	0.4A	2.5A	5%	-15V	0.1A	0.5A	10%	45W

Pin Chart

Model	PIN	1	2	3	4	5
PMP55-10 PMP55-11 PMP55-13 PMP55-14 PMP55-17 PMP55-18	PMP55-10-1 PMP55-12 PMP55-13-1 PMP55-16 PMP55-18	Return	Return	Output#1	Return	Output#1
PMP55-23 PMP55-25	PMP55-24	Common Return	Common Return	Output#1	Common Return	Output#2
PMP55-31 PMP55-32	PMP55-32	Common Return	Common Return	Output#1	Output#3	Output#2

Mechanical Details

