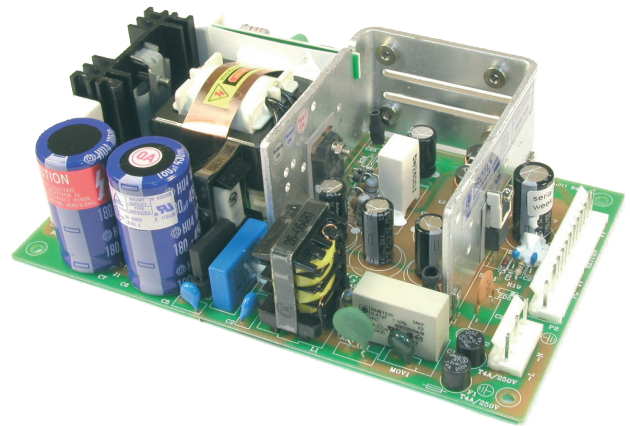


PM110 Series

72-110 WATTS SINGLE & MULTIPLE OUTPUT AC/DC MEDICAL

Features

- **Low safety ground leakage current.**
- **Wide input range 85 to 264Vac.**
- **Input surge current protection.**
- **Overvoltage protection.**
- **Overcurrent protection.**
- **Open PCB construction.**
- **100% burn-in at full rated load.**



Specifications

INPUT

Input Voltage	85–264Vac wide input
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.
Isolation	Input – Output: 4000VAC Input – Ground: 1500VAC Output – Ground: 500VAC
Inrush Current	15A @ 115V, 30A @ 230V

OUTPUT

Output Voltage	See table
Output Voltage Adjustment	V1 ±10%
Output Current	See table
Ripple & Noise	1% peak to peak
Line Regulation	±0.5% 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	Power fail detection signal. TTL logic low upon loss of input power.

OPERATING

MTBF	400,000 hrs @ 25°C
Efficiency	66%–75%

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

MECHANICAL

Dimensions	177.8x108x47mm
Weight	640grams.

PM110 Series

72-110 WATTS SINGLE & MULTIPLE OUTPUT AC/DC MEDICAL

Selection Table

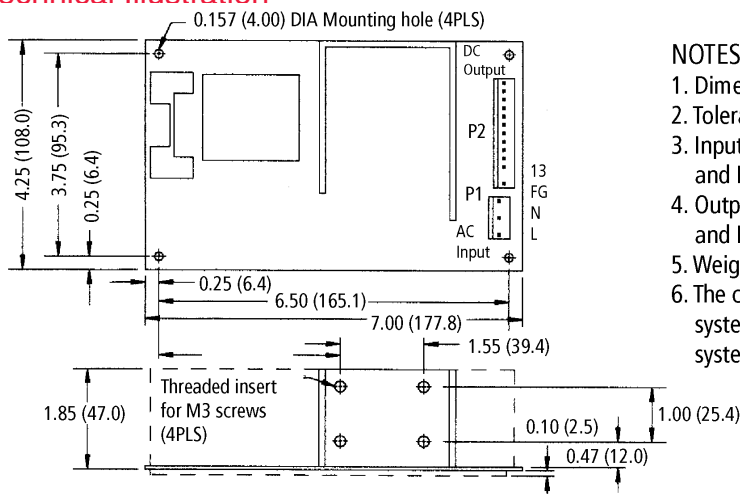
MODEL	OUTPUT #1				OUTPUT #2 (1)				OUTPUT #3				OUTPUT #4				MAX.		
	NUMBER (1)(2)	VNOM	IMIN	IMAX	TOL	VNOM	IMIN	IMAX	IPEAK	TOL	VNOM	IMIN	IMAX	TOL	VNOM	IMIN	IMAX	TOL	OUTPUT POWER (2)
PM110-10-1A	3.3V	0A	22A	3%															72W
PM110-10A	5V	0A	22A	3%															110W
PM110-12A	12V	0A	9.0A	2%															110W
PM110-13A	15V	0A	7.5A	2%															110W
PM110-14A	24V	0A	4.5A	2%															110W
PM110-16A	30V	0A	3.6A	2%															110W
PM110-23A	+5.1V	0A	10A	3%	+12V	0A	5A	9.0A	3%										110W
PM110-31A	+5.1V	0A	10A	3%	+12V	0A	5A	9.0A	3%	-12V	0A	1A	4%						110W
PM110-32A	+5.1V	0A	10A	3%	+15V	0A	4A	7.5A	3%	-15V	0A	1A	4%						110W
PM110-40A	+5.1V	0A	10A	3%	+12V	0A	5A	9.0A	3%	-12V	0A	1A	4%	-5V	0A	1A	4%		110W
PM110-41A	+5.1V	0A	10A	3%	+15V	0A	4A	7.5A	3%	-15V	0A	1A	4%	+24V	0A	1A	4%		110W
PM110-42A	+5.1V	0A	10A	3%	+12V	0A	5A	9.0A	3%	-12V	0A	1A	4%	+12V	0A	1A	4%		110W
PM110-45A	+5.1V	0A	10A	3%	+12V	0A	5A	9.0A	3%	-12V	0A	1A	4%	+24V	0A	1A	4%		110W
PM110-45-1A	+5.1V	2A	10A	3%	+12V	0A	5A	9.0A	3%	-12V	0A	1A	4%	+24V	1.5A	3A	10%		110W
PM110-45-2A	+5.1V	0A	10A	3%	+24V	0A	3A	5.0A	3%	-12V	0A	1A	4%	+12V	0A	1A	4%		110W
PM110-46A	+5.1V	0A	10A	3%	+15V	0A	4A	7.5A	3%	-15V	0A	1A	4%	-5V	0A	1A	4%		110W

- NOTES: (1) Peak output current with 10% maximum duty cycle for less than 60 seconds. Total peak power must not exceed 130watts.
 (2) 110 watts maximum at 25CFM forced air cooling or 80 watts maximum at convection cooling, except model PM110-10-1A which is rated maximum 60 watts at convection cooling or 72 watts at 25 CFM forced air cooling.
 (3) Safety agency approvals are for the above listed models in PCB mounted format. To order a model with a metallic L-bracket or box, change suffix "AL" to "B" for L-bracket format, to "C" for enclosed format.
 (4) The output #1 of model PM110-45-1A 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	8,9	10	11	12	13
PM110-10-1A	PM110-10A	Output 1	Return	Return	Output 1	P.F.D.	N.C.	Key	N.C.
PM110-12A	PM110-13A								
PM110-14A	PM110-16A								
PM110-23A		Output 1	Common Return	Common Return	Output 2	P.F.D.	N.C.	Key	N.C.
PM110-31A	PM110-32A	Output 1	Common Return	Common Return	Output 2	P.F.D.	Output 3	Key	N.C.
PM110-40A	PM110-41A	Output 1	Common Return	Common Return	Output 2	P.F.D.	Output 3	Key	Output 4
PM110-42A	PM110-45A								
PM110-45-1A	PM110-45-2A								
PM110-46A									

Technical Illustration



NOTES

- Dimensions shown in inches (mm)
- Tolerance 0.02 (0.5) max
- Input connector mates with Molex housing 09-50-3051 and Molex 2878 series crimp terminal
- Output connector mates with Molex housing 09-50-3131 and Molex 2878 series crimp terminal
- Weight: 640 grams (PCB format)
- The copper pads of the mounting hole near P1 is for system grounding through a metallic stand-off to system chassis