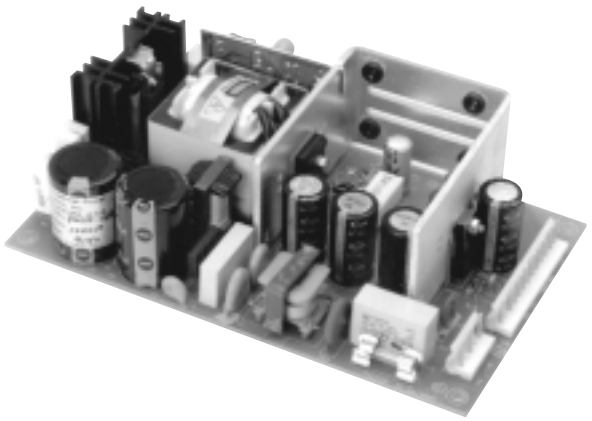
XPiQ inc.

Intelligent Design Quality Product

International Power Sources, Inc.

110 Watts
PD110 Series



- Low Cost
- 100% Burn-In
- Small Size, Light Weight
- Three Wide Input Ranges
- Overvoltage Protection
- Overcurrent Protection

Specification

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

Input

Input Voltage	•	*10 to 20 VDC (PD110 "L" series)* *18 to 36 VDC (PD110 "M" series)* *36 to 72 VDC (PD110 "H" series)*
Input Current	•	15A (rms) for 12 VDC 9.4A (rms) for 24 VDC 4.7A (rms) for 48 VDC

Output

Output Voltage/ Current	•	*See rating chart*
Ripple	•	*1% peak to peak maximum*
Overvoltage Protection	•	*Provided on output #1 only, set at 112-132% of its nominal output voltage*
Overcurrent Protection:	•	*All outputs protected in short circuit conditions*
Temperature Coefficient:	•	*All outputs ±0.04%/°C maximum*

General

Efficiency	•	*60% minimum*
Hold-up time	•	*10 msec*
Line Regulation	•	*±0.5% max.*
Isolation Voltage	•	*1000 VDC from input to output*

Environmental

Operating Temperature	•	*0°C to +70°C**
Storage Temperature	•	*-40°C to +85°C*
MTBF	•	*100,000 hours*
Weight	•	*670 g without cover*

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

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OUTPUT VOLTAGE & CURRENT RATINGS — PD110

Model	Output #1				Output #2[1]				Output #3				Output #4				Maximum Output Power
	Vnom	Imin	Imax	Tol.	Vnom	Imax	Ipeak	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
PD110-10	5 V	0.0 A	22.0 A	3%													110 W
PD110-12	12 V	0.0 A	9.0 A	2%													110 W
PD110-13	15 V	0.0 A	7.5 A	2%													110 W
PD110-14	24 V	0.0 A	4.5 A	2%													110 W
PD110-16	30 V	0.0 A	3.6 A	2%													110 W
PD110-23	+5 V	0.8 A	10.0 A	3%	+12 V	5 A	9.0 A	3%									110 W
PD110-31	+5 V	0.8 A	10.0 A	3%	+12 V	5 A	9.0 A	3%	-12 V	0 A	1 A	4%					110 W
PD110-32	+5 V	0.8 A	10.0 A	3%	+15 V	4 A	7.5 A	3%	-15 V	0 A	1 A	4%					110 W
PD110-40	+5 V	0.8 A	10.0 A	3%	+12 V	5 A	9.0 A	3%	-12 V	0 A	1 A	4%	-5 V	0 A	1 A	4%	110 W
PD110-41	+5 V	0.8 A	10.0 A	3%	+15 V	4 A	7.5 A	3%	-15 V	0 A	1 A	4%	+24 V	0 A	1 A	4%	110 W
PD110-42	+5 V	0.8 A	10.0 A	3%	+12 V	5 A	9.0 A	3%	-12 V	0 A	1 A	4%	+12 V	0 A	1 A	4%	110 W
PD110-45-1	+5 V	0.8 A	10.0 A	3%	+12 V	5 A	9.0 A	3%	-12 V	0 A	1 A	4%	+24 V	0 A	3 A	8%	110 W
PD110-45-2	+5 V	0.8 A	10.0 A	3%	+24 V	3 A	5.0 A	5%	-12 V	0 A	1 A	4%	+12 V	0 A	1 A	4%	110 W
PD110-46	+5 V	0.8 A	10.0 A	3%	+15 V	4 A	7.5 A	3%	-15 V	0 A	1 A	4%	-5 V	0 A	1 A	4%	110 W

Notes

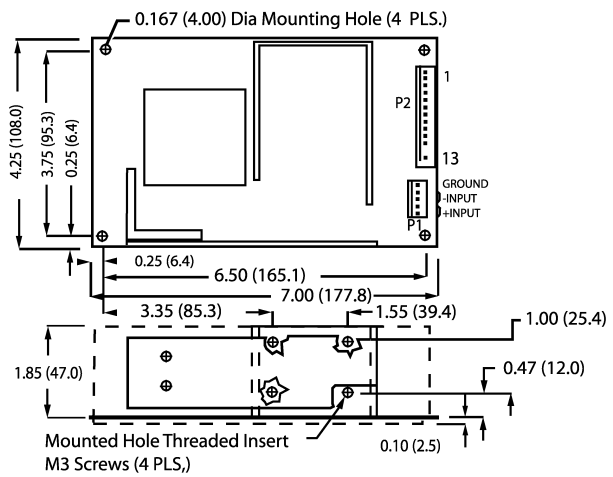
1. *For output #2, minimum load is 0 A and peak current is shown for 10% maximum duty cycle for less than 60 seconds.*
2. *PD110 "M" & "H" series is suitable for 110 watts maximum at 20 CFM forced air cooling or 80 watts maximum at convection cooling.*
3. *PD110 "L" series is suitable for 90 watts maximum at 20 CFM forced air cooling or 70 watts maximum at convection cooling.*
4. *Suffix codes for mechanical format and input range are as follows: PD110-XXYZ: "XX" is the model code from the above table. "Y" is the input range. (L=10-20VDC, M=18-36VDC, H=36-72VDC); "Z" is the mechanical format (A=open PCB, C=enclosed) EX: PD110-31MC, 18-36VDC input, enclosed form.*

Pin Chart

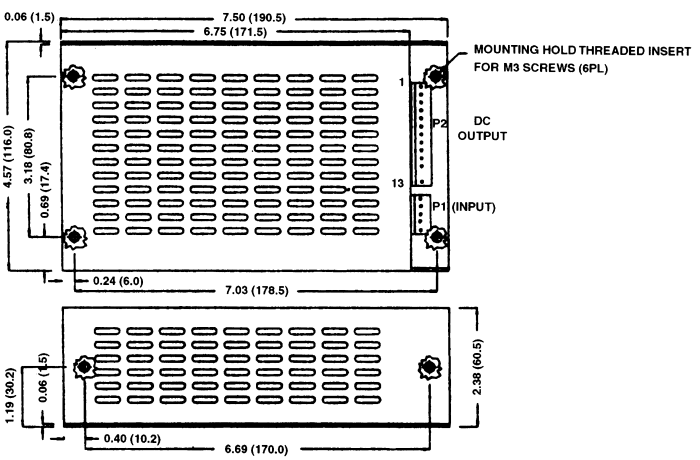
Model	1, 2, 3	4, 5	6, 7	8, 9	10	11	12	13
PD110-10, PD110-12 PD110-13, PD110-14 PD110-16	OUTPUT #1	RETURN	RETURN	OUTPUT #1	N.C.	N.C.	KEY	N.C.
PD110-23	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	N.C.	N.C.	KEY	N.C.
PD110-31, PD110-32	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	N.C.	OUTPUT #3	KEY	N.C.
PD110-40, PD110-41 PD110-42, PD110-45-1 PD110-45-2, PD110-46	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	N.C.	OUTPUT #3	KEY	OUTPUT #4

Mechanical Details

OPEN PCB "A"



ENCLOSED "C"



Dimensions shown in inches (mm). Tolerance 0.02 (0.5) maximum. 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 material.

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