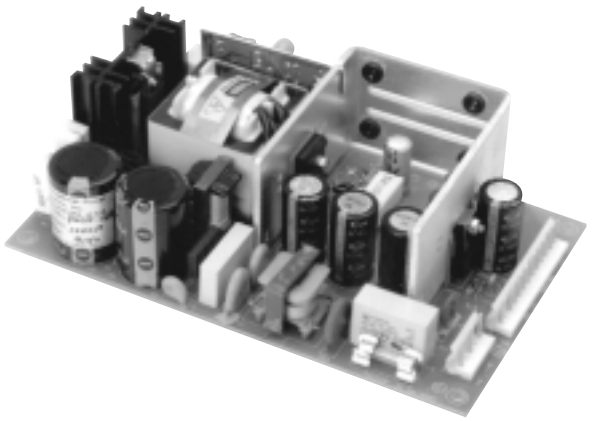
XPiQ inc.
Intelligent Design Quality Product

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*

PH: 508 429.9883
FAX: 800 226.2100
Email: sales@xp-iq.com
Holliston, MA 01746 USA

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

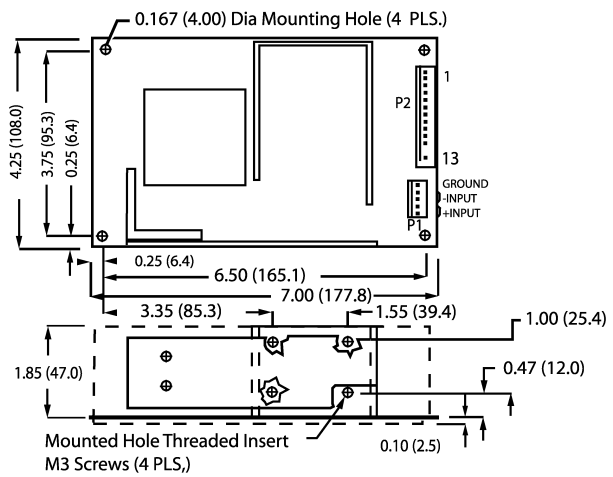
1. For output #2, minimum load is 0 A and peak current is shown for 10% maximum duty cycle for less than 60 seconds.
2. PD110 "M" & "H" series is suitable for 110 watts maximum at 20 CFM forced air cooling or 80 watts maximum at convection cooling.
3. PD110 "L" series is suitable for 90 watts maximum 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

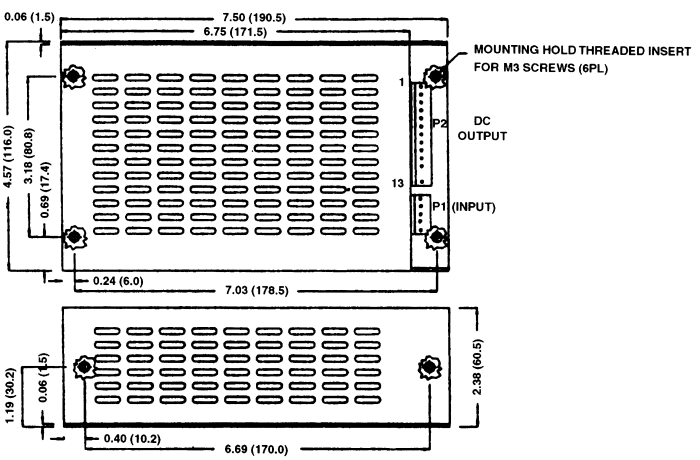
Model	1, 2, 3	4, 5	6, 7	8, 9	10	11	12	13
PD110-10, PD110-12 PD110-13, PD110-14 PD110-16	OUTPUT #1	RETURN	RETURN	OUTPUT #1	N.C.	N.C.	KEY	N.C.
PD110-23	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	N.C.	N.C.	KEY	N.C.
PD110-31, PD110-32	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	N.C.	OUTPUT #3	KEY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