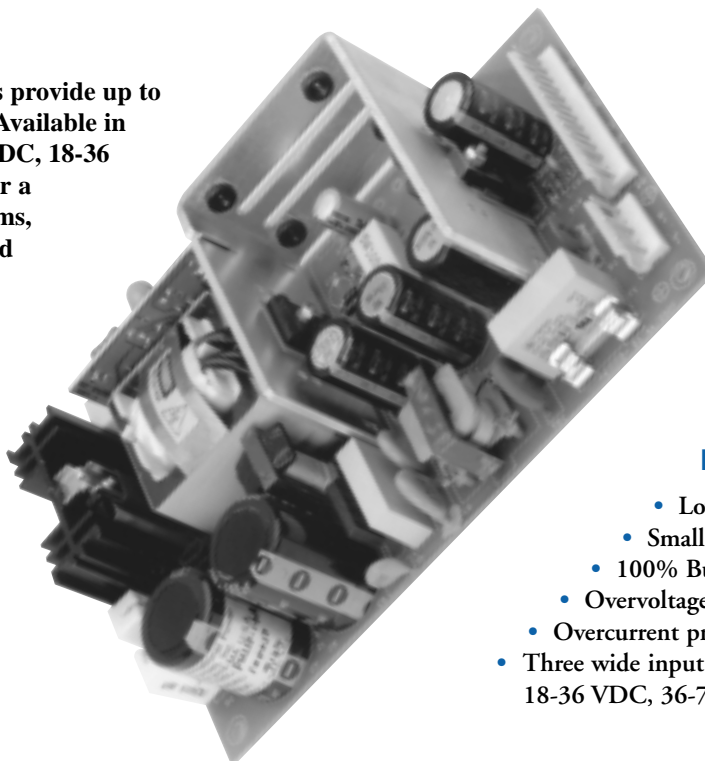


NEW • **WIDE INPUT RANGE**
• **LOW COST DC/DC CONVERTER**

110 WATT
DC/DC CONVERTER

DESCRIPTION

The PD110 Series of DC-DC converters provide up to 110 watts of continuous output power. Available in three standard input ranges of 10-20 VDC, 18-36 VDC, and 36-72 VDC, they are ideal for a variety of applications including telecoms, process control, portable equipment and vehicle mounted instrumentation. All units are available in compact open PCB or enclosed mechanical formats.



FEATURES

- Low cost
- Small size, light weight
- 100% Burn-in
- Overvoltage protection
- Overcurrent protection
- Three wide input ranges: 10-20 VDC, 18-36 VDC, 36-72 VDC

OUTPUT VOLTAGE/CURRENT RATINGS CHART

Model	Output #1				Output #2				Output #3				Output #4				Maximum Output Power	
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.		
PD110-10	5V	0A	22A	3%	N/A				N/A				N/A				110W	
PD110-12	12V	0A	9A	2%	N/A				N/A				N/A				110W	
PD110-13	15V	0A	7.5A	2%	N/A				N/A				N/A				110W	
PD110-14	24V	0A	4.5A	2%	N/A				N/A				N/A				110W	
PD110-16	30V	0A	3.6A	2%	N/A				N/A				N/A				110W	
PD110-23	+5V	0.8A	10A	3%	+12V	0A	5A	9A	3%	N/A				N/A				110W
PD110-31	+5V	0.8A	10A	3%	+12V	0A	5A	9A	3%	-12V	0A	1A	4%	N/A				110W
PD110-32	+5V	0.8A	10A	3%	+15V	0A	4A	7.5A	3%	-15V	0A	1A	4%	N/A				110W
PD110-40	+5V	0.8A	10A	3%	+12V	0A	5A	9A	3%	-12V	0A	1A	4%	-5V	0A	1A	4%	110W
PD110-41	+5V	0.8A	10A	3%	+15V	0A	4A	7.5A	3%	-15V	0A	1A	4%	+24V	0A	1A	4%	110W
PD110-42	+5V	0.8A	10A	3%	+12V	0A	5A	9A	3%	-12V	0A	1A	4%	+12V	0A	1A	4%	110W
PD110-45-1	+5V	0.8A	10A	3%	+12V	0A	5A	9A	3%	-12V	0A	1A	4%	+24V	0A	3A	8%	110W
PD110-45-2	+5V	0.8A	10A	3%	+24V	0A	3A	5A	5%	-12V	0A	1A	4%	+12V	0A	1A	4%	110W
PD110-46	+5V	0.8A	10A	3%	+15V	0A	4A	7.5A	3%	-15V	0A	1A	4%	-5V	0A	1A	4%	110W

NOTE: (1) Peak output current with 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.

GENERAL SPECIFICATIONS

Efficiency:	60% minimum at max. output power
Line regulation:	±0.5% maximum at full load
Withstand voltage:	1000 VAC from input to output
MTBF at full load:	100,000 hours minimum
Operating temperature:	0°C to +70°C*
Storage temperature:	-40°C to +85°C
Relative humidity:	5% to 95% non-condensing
Weight:	670 grams (without cover)

INPUT SPECIFICATIONS

Input voltage:	10 to 20VDC (PD110 "L") 18 to 36VDC (PD110 "M") 36 to 72VDC (PD110 "H")
Input current:	15A (rms) for 12 VDC 9.4A (rms) for 24 VDC 4.7A (rms) for 48 VDC

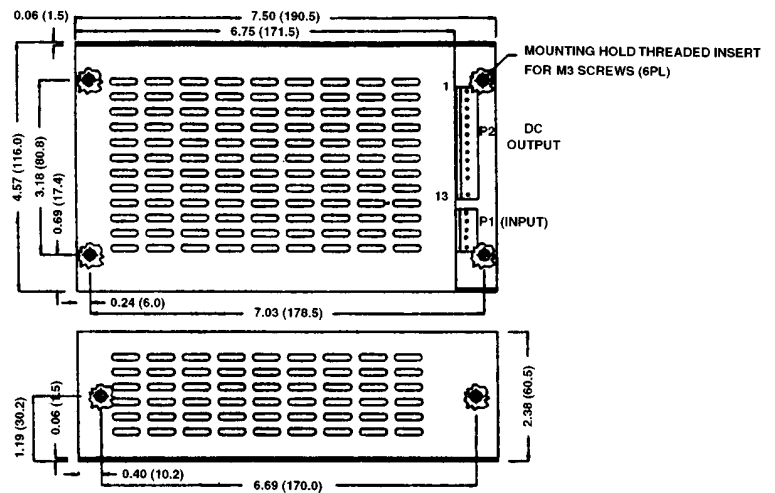
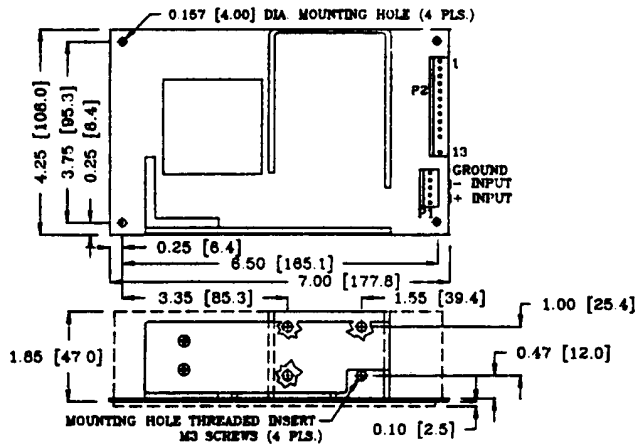
OUTPUT SPECIFICATIONS

Output voltage:	See Rating Chart
Output current:	See Rating Chart
Output power range:	4 to 110 watts
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 to short circuit conditions
Temperature coefficient:	All outputs ±0.04%/°C maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value 500us after a 25% step load change

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

MECHANICAL SPECIFICATIONS

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.



PIN CHART

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