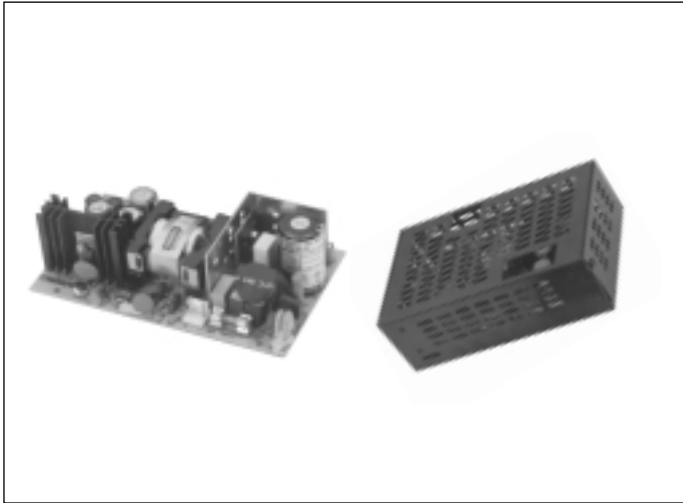


# DC/DC Converters

**XPiQ inc.**  
Intelligent Design Quality Product



**65 Watts**  
**PD65 Series**



- Low Cost
- 100% Burn-In
- Small Size, Light Weight
- Three Wide Input Voltage Ranges  
10-30 VDC, 20-60 VDC, 30-90 VDC
- Overvoltage Protection
- Overcurrent Protection

## Specification

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

### Input

- Input Voltage*
- 10 to 30 VDC (PD65 "L" series)
  - 20 to 60 VDC (PD65 "M" series)
  - 30 to 90 VDC (PD65 "H" series)
- Input Current*
- 4.1A (rms) for 24 VDC
  - 2.1A (rms) for 48 VDC
  - 1.5A (rms) for 72 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  $\pm 0.04\%/^{\circ}\text{C}$  maximum

### General

- Efficiency*
- 65% - 80%
- Hold-up time*
- 10 msec
- Line Regulation*
- $\pm 0.5\%$  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*
- 380 grams - PCB
  - 640 grams - enclosed

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

# OUTPUT VOLTAGE & CURRENT RATINGS

PD 65

Model	Output #1				Output #2				Output #3				Output #4				Maximum Output Power <sup>2</sup>
	Vnom	Imin	I <sub>max</sub>	Tol.	Vnom	Imin	I <sub>max</sub>	Tol.	Vnom	Imin	I <sub>max</sub>	Tol.	Vnom	Imin	I <sub>max</sub>	Tol.	
PD65-10	5V	0.0A	10A	1%													65W
PD65-12	12V	0.0A	5.5A	1%													65W
PD65-13	15V	0.0A	4.5A	1%													65W
PD65-14	24V	0.0A	3.0A	1%													65W
PD65-25	+5V	1.0A	6.0A	3%	+24V	0.3A	2.0A	5%									65W
PD65-30	+5V	1.0A	6.0A	3%	+12V	0.5A	3.0A	5%	+24V	0.1A	0.5A	10%					65W
PD65-31	+5V	1.0A	6.0A	3%	+12V	0.5A	3.0A	5%	+12V	0.1A	0.5A	10%					65W
PD65-32	+5V	1.0A	6.0A	3%	+15V	0.4A	3.0A	5%	+12V	0.1A	0.5A	10%					65W
PD65-40	+5V	1.0A	6.0A	3%	+12V	0.5A	3.0A	5%	-12V	0.1A	0.5A	10%	-5V	0.1A	0.5A	10%	65W

## Notes

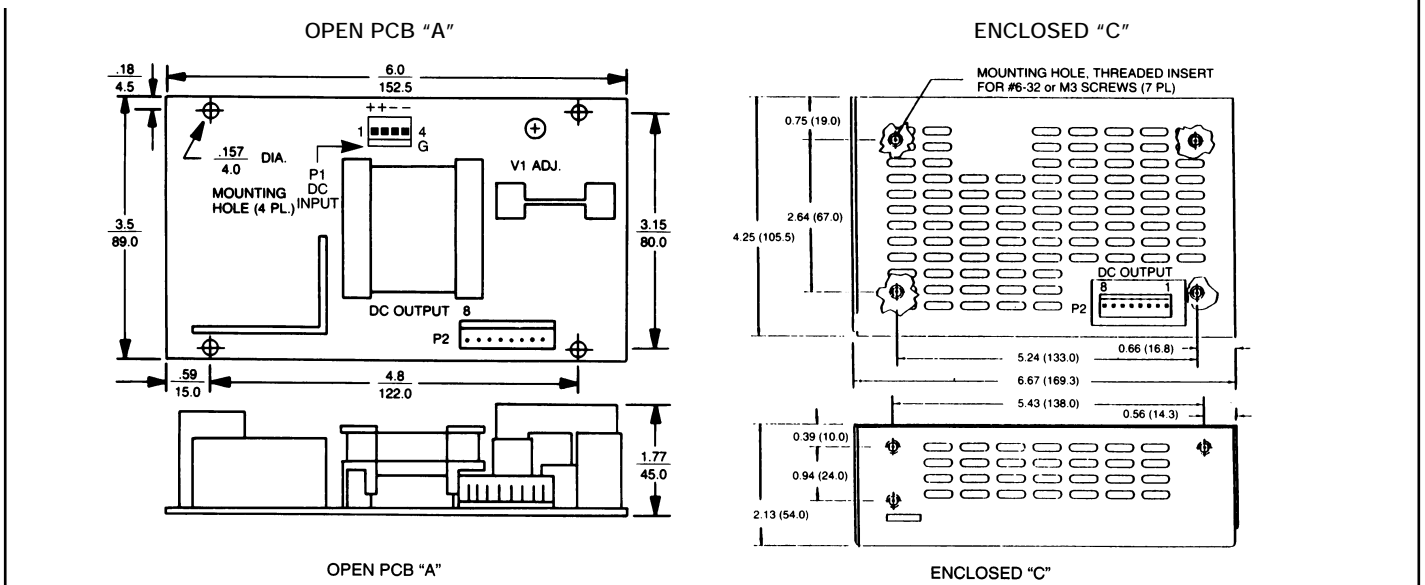
- All multi-output units may be operated at no load without damage. At no load, output tolerance increases to 10%.
- Maximum output power for 10-30 VDC input range is 70% of that shown above.
- Suffix codes for mechanical format and input range as follows:  
 Input voltage range    L: 10-30 VDC<sup>2</sup>    Mechanical format:    A: PCB only  
                                   M: 20-60 VDC                                   C: Enclosed  
                                   H: 30-90 VDC

Example: PD65-31MC (20-60 VDC input range/Enclosed).

## Pin Chart

MODEL	PIN	1	2	3	4	5	6	7	8
PD65-10 PD65-13	PD65-12 PD65-14	OUTPUT #1	OUTPUT #1	OUTPUT #1	OUTPUT #1	RETURN	RETURN	RETURN	RETURN
PD65-25		OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	OUTPUT #2	N.C.	N.C.
PD65-30 PD65-32	PD65-31	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	OUTPUT #2	OUTPUT #3	N.C.
PD65-40		OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #2	OUTPUT #2	OUTPUT #3	OUTPUT #4

## Mechanical Details



Dimensions shown in inches (mm)/Tolerance ± 0.02 (0.5) maximum  
 Input connector mates with Molex housing 09-50-3041 and Molex 2878 series crimp terminal  
 Output connector mates with Molex housing 09-50-3081 and Molex 2878 series crimp terminal

