

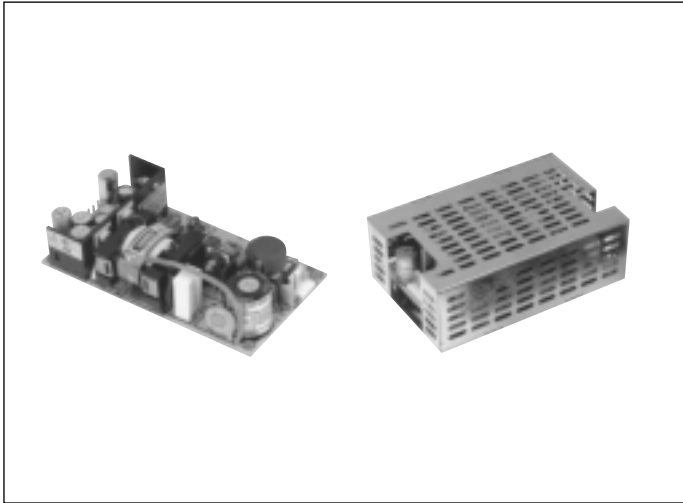
# DC/DC Converters

**XPiQ inc.**

Intelligent Design Quality Product



**40 Watts**  
**PD40 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 (PD40 "L" series)
  - 20 to 60 VDC (PD40 "M" series)
  - 30 to 90 VDC (PD40 "H" series)
- Input Current*
- 2.5A (rms) for 24 VDC
  - 1.3A (rms) for 48 VDC
  - 0.84A (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% minimum
- 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*
- 300 grams - PCB
  - 500 grams - enclosed

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

# OUTPUT VOLTAGE & CURRENT RATINGS

PD 40

Model	Output #1				Output #2				Output #3				Maximum Output Power <sup>2</sup>
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
PD40-10	5V	0.0A	8.0A	1%									40W
PD40-12	12V	0.0A	3.5A	1%									40W
PD40-13	15V	0.0A	3.0A	1%									40W
PD40-14	24V	0.0A	2.0A	1%									40W
PD40-25	+5V	0.5A	3.0A	3%	+24V	0.1A	1.0A	5%					40W
PD40-30	+5V	0.5A	3.0A	3%	+12V	0.2A	2.0A	5%	-5V	0A	0.8A	5%	40W
PD40-31	+5V	0.5A	3.0A	3%	+12V	0.2A	2.0A	5%	-12V	0A	0.8A	5%	40W
PD40-32	+5V	0.5A	3.0A	3%	+15V	0.2A	2.0A	5%	-15V	0A	0.8A	5%	40W

## 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: PD40-31MC (20-60 VDC input range/Enclosed).

## Pin Chart

MODEL	PIN	1	2	3	4	5	6
PD40-10 PD40-13	PD40-12 PD40-14	OUTPUT #1	OUTPUT #1	OUTPUT #1	RETURN	RETURN	RETURN
PD40-25		OUTPUT #2	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	N.C.
PD40-30 PD40-32	PD40-31	OUTPUT #2	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #3

## Mechanical Details

