DC-DC Converters

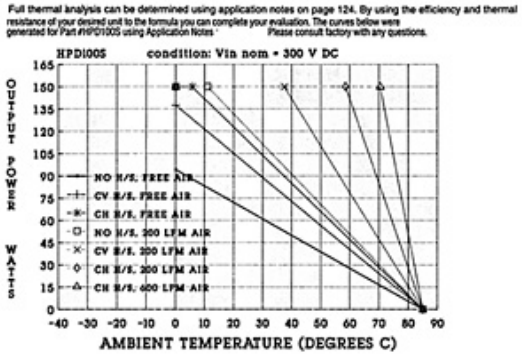
Series HPD Single and Series HPD Dual

Isolated Regulated up to 200 Watts, Wide Input Range/200-380 VDC
Fully Regulated, Short Circuit Protected
Parallel Operation Available

Features:
• Dual isolated outputs
• Short circuit protection
• Input voltage protection
• Thermal, over temp. shutdown
• Line regulation
• Load regulation
• No external components required
• Hi density, hi efficiency design
• Remote shutdown
• Trim capabilities
• Fixed frequency-100 Khtz

Typical Characteristics:
Frequency: 100 Khtz
Base plate: Max. +85° C
Operating temperature: See thermal chart, Min. 0° C ambient, Max. +85° C base plate temp.
Test conditions: 25° C ambient
Isolation Base Input: 2121 VDC
Isolation Input Output: 4242 VDC
Isolation Output to Base: 1000 VDC
Storage temperature: -55° C to +105° C
• 27 Standard Models
100 VDC Output Models
Hi Density 100 Watts
Fixed Frequency
• For all variations, call factory.
For Parallel Operation: Add suffix "P" (i.e. HPD5SP). Consult factory to optimize for your application

The PICO HPD Series of high power DC-DC Converters, allow a wide input voltage of 200-380 VDC, while maintaining a regulated output. They are fully safeguarded for over voltage, over temperature and continuous short circuit protection.
The availability of Dual Isolated Outputs, small size, and the capability of parallel operations as standard features should reduce your design and component costs, while the fixed frequency operation helps parallel connections for higher power requirements. This high density unit is assembled in the USA with PICO quality and component selection, allowing it to meet the most stringent commercial requirements.



Larger Version of Graph

Series HPD Single * 200 Watts * Input 200-380 VDC

Pico Part No.	Input Voltage Range (V DC)	Output Voltage (V DC)	Max. Output Power * (W)	EFF. Full Load Typical ** (%)	Max. Load Regulation (%) ***		Max. Line Regulation At Full Load (%)		Output Voltage Ripple (Full Load) 1-1MHz BW (MV P-P)	Output Voltage Tolerance ** (± %)	Price (US $)
					10-50%	50-100%	200-300V	300-380V			
HPD3.3S	200-380	3.3	75	73	1.50	1.50	1.25	1.25	50	1.50	239.19
HPD5S	200-380	5	100	77	1.25	1.25	1.00	1.00	50	1.50	239.19
HPD5.2S	200-380	5.2	100	77	1.25	1.25	1.00	1.00	50	1.50	239.19
HPD9S	200-380	9	150	80	1.25	1.25	1.00	1.00	50	1.00	239.19
HPD12S	200-380	12	200	82	1.00	1.00	0.75	0.75	50	1.00	239.19
HPD15S	200-380	15	200	83	1.00	1.00	0.75	0.75	50	1.00	239.19
HPD24S	200-380	24	200	85	0.75	0.75	0.50	0.50	50	0.75	239.19
HPD28S	200-380	28	200	86	0.50	0.50	0.50	0.50	50	0.75	239.19
HPD48S	200-380	48	200	86	0.50	0.50	0.50	0.50	50	0.50	239.19
HPD100S	200-380	100	150	85	0.50	0.50	0.50	0.50	50	0.50	306.65

10% Minimum load required at all times.
* Using proper thermal management, maximum temp. of +85° C (case)
** Reading taken at nominal 300 VDC input

Series HPD Dual * 150 Watts * Input 200-380 VDC

Pico Part No.	Input Voltage Range (V DC)	Output Voltage (V DC)	Max. Output Power * (W)	EFF. Full Load Typical ** (%)	Max. Load Regulation (%) ***		Max. Line Regulation At Full Load (%)		Output Voltage Ripple (Full Load) 1-1MHz BW (MV P-P)	Output Voltage Tolerance ** (± %)	Price (US $)
					10-50%	50-100%	200-300V	300-380V			
HPD5D	200-380	5	50/50	77	1.25	1.25	1.00	1.00	50	1.50	319.45
HPD9D	200-380	9	75/75	80	1.25	1.25	1.00	1.00	50	1.00	319.45
HPD12D	200-380	12	75/75	82	1.00	1.00	0.75	0.75	50	1.00	319.45
HPD15D	200-380	15	75/75	83	1.00	1.00	0.75	0.75	50	1.00	319.45
HPD24D	200-380	24	75/75	85	0.75	0.75	0.75	0.75	50	0.75	319.45
HPD28D	200-380	28	75/75	86	0.75	0.75	0.50	0.50	50	0.75	319.45

HPD48D	200-380	48	75/75	86	0.50	0.50	0.50	0.50	50	0.50	319.45

10% Minimum load required at all times.
* Using proper thermal management, maximum temp. of +85° C (case)
** Reading taken at nominal 300 VDC input

****HIGH VOLTAGE SERIES PD
UP TO 350 VDC - 150 WATTS - INPUT 200-380 VDC

PICO PART NO.	INPUT VOLTAGE RANGE (VDC)	OUTPUT VOLTAGE DC	MAX. OUTPUT POWER (W)*	EFF. @ FULL LOAD TYPICAL (%)**	MAX. LOAD REGULATION (%)**		MAX. LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1MhZ BW (%)	OUTPUT VOLTAGE Tolerance (±%)**	PRICE (US $)
					20-50%	50-100%	200-300V	300-380V			
PD125S	200-380	125	150	85	0.5	0.5	0.3	0.3	1	0.5	236.49
PD150S	200-380	150	150	85	0.5	0.5	0.3	0.3	1	0.5	236.49
PD175S	200-380	175	150	85	0.5	0.5	0.3	0.3	1	0.5	236.49
PD200S	200-380	200	150	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PD225S	200-380	225	125	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PD250S	200-380	250	125	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PD275S	200-380	275	100	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PD300S	200-380	300	100	85	0.5	0.5	0.3	0.3	1	0.5	394.15
PD325S	200-380	325	100	85	0.5	0.5	0.3	0.3	1	0.5	394.15
PD350S	200-380	350	100	85	0.5	0.5	0.3	0.3	1	0.5	394.15

10% Minimum load required at all times
*Using proper thermal management maximum temp of +85°C (case)
**Reading taken at nominal 300 VDC input
****UL approval pending

GO TO APPLICATION NOTES

GO TO MECHANICAL CONFIGURATION

For immediate engineering assistance or to place an order: **Call Toll Free: 800-431-1064**

PICO Electronics, Inc.

143 Sparks Ave. Pelham, NY 10803
Tel: 914-738-1400 Fax: 914-738-8225