DC-DC Converters

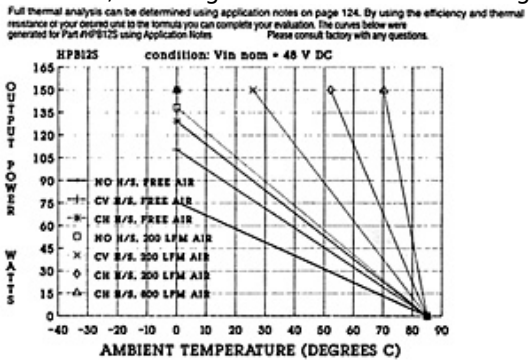
Series HPB Single and Series HPB Dual

Isolated Regulated 150 Watts, Wide Input Range/36-72 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: 2424 VDC
Isolation Output to Base: 1000 VDC
Storage temperature: -55° C to +105° C
• 25 Standard Models
100 VDC Output Models
Hi Density 200 Watts
Fixed Frequency
• For all variations, call factory.
For Parallel Operation: Add suffix "P" (i.e. HPB5SP). Consult factory to optimize for your application.

The PICO HPB Series of high power DC-DC Converters, allow a wide input voltage of 36-72 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 HPB Single * 150 Watts * Input 36-72 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%	36-48V	48-72V			
HPB3.3S	36-72	3.3	60	72	2.00	2.00	1.50	1.50	50	1.5	239.19
HPB5S	36-72	5	100	75	1.50	1.50	1.00	1.00	50	1.5	239.19
HPB5.2S	36-72	5.2	100	75	1.50	1.50	1.00	1.00	50	1.5	239.19
HPB9S	36-72	9	150	80	1.50	1.50	1.00	1.00	50	1.0	239.19
HPB12S	36-72	12	150	82	1.25	1.25	0.75	0.75	50	1.0	239.19
HPB15S	36-72	15	150	83	1.25	1.25	0.75	0.75	50	1.0	239.19
HPB24S	36-72	24	150	84	1.00	1.00	0.75	0.75	50	1.0	239.19
HPB28S	36-72	28	150	85	0.75	0.75	0.50	0.50	50	0.5	239.19
HPB48S	36-72	48	150	84	0.75	0.75	0.50	0.50	50	0.5	223.54
HPB100S	36-72	100	150	84	0.75	0.75	0.50	0.50	50	0.5	306.65

10% Minimum load required at all times.
* Using proper thermal management, maximum temp. of +85° C (case)
** Reading taken at nominal 48 VDC input

Series HPB Dual * 150 Watts * Input 36-72 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%	36-48V	48-72V			
HPB5D	36-72	5	50/50	75	1.50	1.50	1.00	1.00	50	1.50	319.45
HPB9D	36-72	9	75/75	80	1.50	1.50	1.00	1.00	50	1.00	319.45
HPB12D	36-72	12	75/75	82	1.25	1.25	0.75	0.75	50	1.00	319.45
HPB15D	36-72	15	75/75	83	1.25	1.25	0.75	0.75	50	1.00	319.45
HPB24D	36-72	24	75/75	84	1.00	1.00	0.75	0.75	50	1.00	319.45
HPB28D	36-72	28	75/75	85	0.75	0.75	0.75	0.75	50	0.75	319.45

HPB48D	36-72	48	75/75	84	0.75	0.75	0.75	0.75	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 48 VDC input

****HIGH VOLTAGE SERIES PB
TO 300VDC - 150 WATTS - INPUT 36-72 VDC

PICO PART NUMBER	INPUT VOLTAGE RANGE (VDC)	OUTPUT VOLTAGE DC	MAX. OUTPUT POWER (W)*	EFF. @ FULL LOAD TYPICAL (%)**	MAX. LOAD REGULATION (%)**		MAX. LINE REGULATION AT FULL LOAD (%)		OUPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (%)	OUTPUT VOLTAGE Tolerance (±%)**	PRICE (US $)
					20-50%	50-100%	36-48V	48-72V			
PB125S	36-72	125	150	84	0.5	0.5	0.3	0.3	1	0.5	236.49
PB150S	36-72	150	150	84	0.5	0.5	0.3	0.3	1	0.5	236.49
PB175S	36-72	175	150	84	0.5	0.5	0.3	0.3	1	0.5	236.49
PB200S	36-72	200	150	84	0.5	0.5	0.3	0.3	1	0.5	315.32
PB225S	36-72	225	125	84	0.5	0.5	0.3	0.3	1	0.5	315.32
PB250S	36-72	250	125	84	0.5	0.5	0.3	0.3	1	0.5	315.32
PB275S	36-72	275	100	84	0.5	0.5	0.3	0.3	1	0.5	315.32
PB300S	36-72	300	100	84	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 48VDC 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**

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