DC-DC Converters

Series HPC Single and Series HPC Dual

Isolated Regulated up to 200 Watts, Wide Input Range/100-180 VDC
Fully Regulated, Short Circuit Protected
Parallel Operation Available

Features:

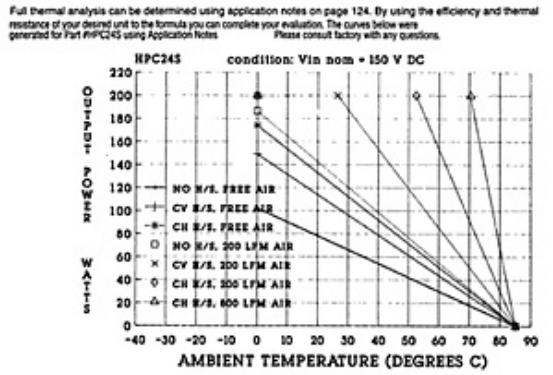
- Dual isolated outputs
- Short circuit protection
- Input voltage protection
- Thermal, over temp. shutdown
- Line regulation
- Load regulation
- No external components required
- Hi density, hi efficiency design
- Remote shutdown
- Trim capabilities
- Fixed frequency-100 Khtz

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: 2000 VDC
Isolation Input Output: 2000 VDC
Isolation Output to Base: 1000 VDC
Storage temperature: -55° C to +105° C

- **17 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. HPC5SP)

The new PICO HPC Series of high power DC-DC Converters, allow a wide input voltage of 100-180 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 HPC Single * 200 Watts * Input 100-180 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%	100-150	150-180			
HPC3.3S	100-180	3.3	75	71	1.50	1.50	1.25	1.25	50	1.5	239.19
HPC5S	100-180	5	100	76	1.25	1.25	1.00	1.00	50	1.5	239.19
HPC5.2S	100-180	5.2	100	76	1.25	1.25	1.00	1.00	50	1.5	239.19
HPC9S	100-180	9	150	80	1.25	1.25	1.00	1.00	50	1.0	239.19
HPC12S	100-180	12	200	83	1.00	1.00	0.75	0.75	50	1.0	239.19
HPC15S	100-180	15	200	84	1.00	1.00	0.75	0.75	50	1.0	239.19
HPC24S	100-180	24	200	86	0.75	0.75	0.50	0.50	50	0.75	239.19
HPC28S	100-180	28	200	86	0.75	0.75	0.50	0.50	50	0.75	239.19
HPC48S	100-180	48	200	86	0.50	0.50	0.50	0.50	50	0.50	239.19
HPC100S	100-180	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 150 VDC input

Series HPC Dual * 150 Watts * Input 100-180 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%	100-150	150-180			
HPC5D	100-180	5	50/50	76	1.25	1.25	1.00	1.00	50	1.5	319.45
HPC9D	100-180	9	75/75	80	1.25	1.25	1.00	1.00	50	1.0	319.45
HPC12D	100-180	12	75/75	83	1.00	1.00	0.75	0.75	50	1.0	319.45
HPC15D	100-180	15	75/75	84	1.00	1.00	0.75	0.75	50	1.0	319.45

HPC24D	100-180	24	75/75	86	0.75	0.75	0.75	0.75	50	0.75	319.45
HPC28D	100-180	28	75/75	86	0.75	0.75	0.50	0.50	50	0.75	319.45
HPC48D	100-180	48	75/75	85	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 150 VDC input

HIGH VOLTAGE SERIES PC
TO 300 VDC - 150 WATTS - INPUT 100 - 180 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 (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1MHzBW (%)	OUTPUT VOLTAGE TOLERANCE (±%)*	PRICE (US $)
					20 - 50%	50 - 100%	100 - 150 V	150 - 180 V			
PC125S	100 - 180	125	150	85	0.5	0.5	0.3	0.3	1	0.5	236.49
PC150S	100 - 180	150	150	85	0.5	0.5	0.3	0.3	1	0.5	236.49
PC175S	100 - 180	175	150	85	0.5	0.5	0.3	0.3	1	0.5	236.49
PC200S	100 - 180	200	150	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PC225S	100 - 180	225	125	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PC250S	100 - 180	250	125	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PC275S	100 - 180	275	100	85	0.5	0.5	0.3	0.3	1	0.5	315.32
PC300S	100 - 180	300	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 150 VDC input
****UL approval pending

Go To Mechanical Configuration

Go To Application Notes

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

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