

DC-DC Converters



Series LPC Single and Series LPC Dual

Isolated Regulated 75 Watts, Wide Input Range/100-180VDC

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

• **17 Standard Models**

Hi Density 75 Watts

Fixed Frequency

• For all variations, call factory.

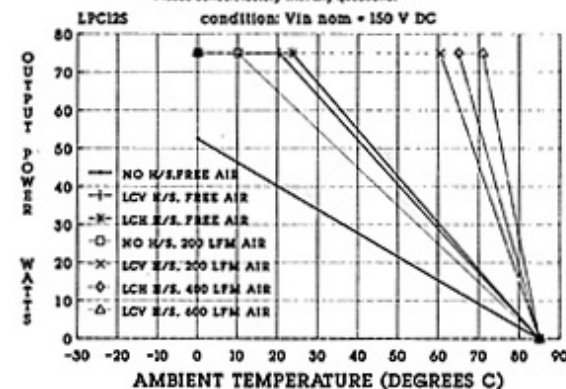
For Parallel Operation: Add suffix "P"(i.e. LPC5SP). Consult factory to optimize for your application.

The PICO LPC 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.

Full thermal analysis can be determined using application notes on page 124. By using the efficiency and thermal resistance of your desired unit to the formula you can complete your evaluation. The curves below were generated for Part #LPC12S using Application Notes. Please consult factory with any questions.



[Larger Version of Graph](#)

Series LPC Single * 75 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%	100-150V	150-180V			
LPC3.3S	100-180	3.3	30	74	1.25	1.25	0.75	0.75	50	2.0	221.58
LPC5S	100-180	5	50	81	1.00	1.00	0.75	0.75	50	1.5	221.58
LPC5.2S	100-180	5.2	50	81	1.00	1.00	0.75	0.75	50	1.5	221.58
LPC9S	100-180	9	65	84	0.75	0.75	0.5	0.5	50	1.0	221.58
LPC12S	100-180	12	75	85	0.75	0.75	0.5	0.5	50	1.0	221.58
LPC15S	100-180	15	75	86	0.75	0.75	0.5	0.5	50	1.0	221.58
LPC24S	100-180	24	75	87	0.5	0.5	0.5	0.5	50	0.5	221.58
LPC28S	100-180	28	75	87	0.5	0.5	0.3	0.3	50	0.5	221.58
LPC48S	100-180	48	75	85	0.5	0.5	0.3	0.3	50	0.5	221.58
LPC100S	100-180	100	75	85	0.5	0.5	0.3	0.3	100	0.5	305.32
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 LPC Dual * 75 Watts * Input 100-180 VDC											
Pico Part No.	Input Voltage Range (V DC)	Output Voltage Per Ouptut (V DC)	Max. Output Power Per Output * (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 V	150-180 V			
LPC5D	100-180	5	25	81	1.0	1.0	0.75	0.75	50	1.5	298.87
LPC9D	100-180	9	32.5	84	1.0	1.0	0.75	0.75	50	1.0	298.87
LPC12D	100-180	12	37.5	85	0.75	0.75	0.5	0.5	50	1.0	298.87
LPC15D	100-180	15	37.5	86	0.75	0.75	0.5	0.5	50	1.0	298.87

LPC24D	100-180	24	37.5	87	0.5	0.5	0.5	0.5	50	0.5	298.87
LPC28D	100-180	28	37.5	87	0.5	0.5	0.5	0.5	50	0.5	298.87
LPC48D	100-180	48	37.5	85	0.5	0.5	0.5	0.5	50	0.5	321.22

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 LPC TO 250 VDC - 50 WATTS - INPUT 100 - 180 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 (%)		OUPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (%)	OUTPUT VOLTAGE Tolerance (±%)**	PRICE (US \$)
					20-50%	50-100%	100-150V	150-180V			
LPC125S	100-180	125	50	85	0.5	0.5	0.3	0.3	1.0	0.5	305.32
LPC150S	100-180	150	50	85	0.5	0.5	0.3	0.3	1.0	0.5	305.32
LPC175S	100-180	175	50	85	0.5	0.5	0.3	0.3	1.0	0.5	305.32
LPC200S	100-180	200	50	85	0.5	0.5	0.3	0.3	1.0	0.5	407.09
LPC225S	100-180	225	50	85	0.5	0.5	0.3	0.3	1.0	0.5	407.09
LPC250S	100-180	250	50	85	0.5	0.5	0.3	0.3	1.0	0.5	407.09

10% Minimum load required at all times. *Using proper thermal management maximum temp. of +85°C (case)

** Reading raken at nominal 150 VDC input

*** UL approval pending

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[GO TO MECHANICAL CONFIGURATION](#)

For immediate engineering assistance or to place an order:

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