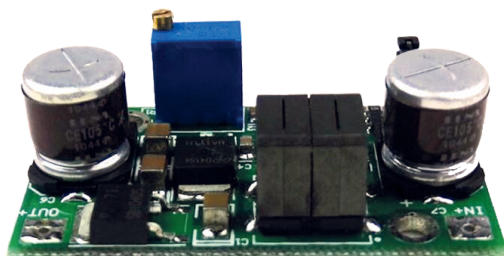

DCDC-ELR30-2A
30W step up / down module



This is a high-performance switching boost and buck module with 2A current.

The module is the second generation of high-frequency switching technology and uses FDD8447L core chip.

Specifications

Item	Value	Remarks
Description	step-up / down	
Power	30W	Input max.
Input range	5V ~ 25V	
Output range	0.5V ~ 25V	
Output current	0 ~ 2A	
Working temperature	-40°C ~ +85°C	If working temperature is higher than 40°C working power should be reduced or heat dissipation should be improved.
Conversion efficiency	<88%	The smaller the difference between the input and output voltage, the higher the efficiency.
Dimensions	48 x 26 x 13 mm	
Weight	12g	
Connection mode	Welding	
Waterproof	IP20	
Shortcircuit protection	No	Fuses and protection circuits must be installed on the input side
Input reverse polarity protection	No	A protection diode must be installed on the input side
Load regulation	±0.5%	
Voltage regulation	±0.5%	

Warning!

To prevent fire shock hazard do not expose this appliance to rain or moisture. Always place the converter in an environment which is:

- Well ventilated.
- Not exposed to direct sunlight or heat source.
- Out of reach from children.
- Away from water/moisture, oil or grease.
- Away from any flammable substance.

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Operation

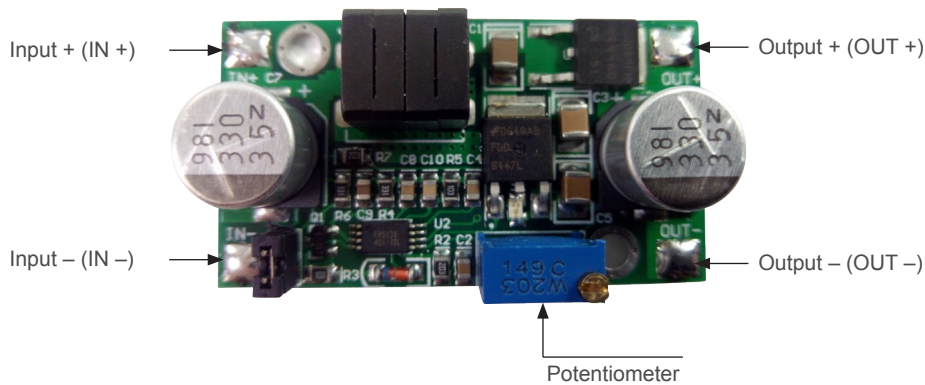
Step-up

Input		Output		P(in)	P(out)	Efficiency
V (V)	I (Ah)	V (V)	I (Ah)	W	W	%
5	1.36	12.00	0.50	6.80	6.00	88.24
5	2.98	24.00	0.45	14.90	10.80	72.48
12	2.25	23.84	1.00	27.00	23.84	88.30
12	2.49	13.10	2.00	29.90	26.20	87.68
15	1.98	23.68	1.10	29.70	26.05	87.70

Step-down

Input		Output		P(in)	P(out)	Efficiency
V (V)	I (Ah)	V (V)	I (Ah)	W	W	%
24	1.23	12.8	2	29.52	25.6	86.59
24	0.51	5.0	2	12.24	10.0	81.70
24	0.36	3.3	2	8.64	6.6	76.39
12	1.00	5.0	2	12.00	10.0	83.33
12	0.69	3.3	2	8.28	6.6	79.71

Use mode



- If you use this module like a step-up, first, turn the potentiometer clockwise to raise the output voltage. Then connect the source.
- If you use this module like a step-down, first, turn the potentiometer counterclockwise to lower the output voltage. Then connect the source.
- Do not exceed the input power limits.
- Do not exceed the current output limits.
- Do not short-circuit the input and output connections.
- Do not reverse polarity of the input and output connections.
- Set output voltage before connecting load.