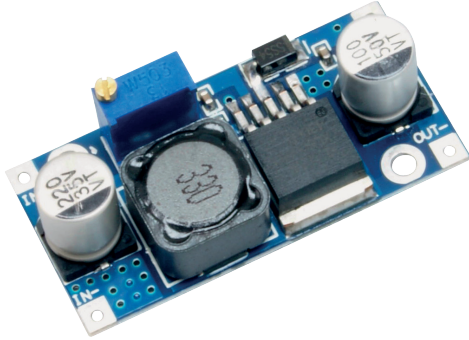


DCDC-EL20-0.5A
20W step up module



This is a high-performance switching buck module with 0.5A current.

The module is the second generation of high-frequency switching technology and uses XL6009 core chip.

Specifications

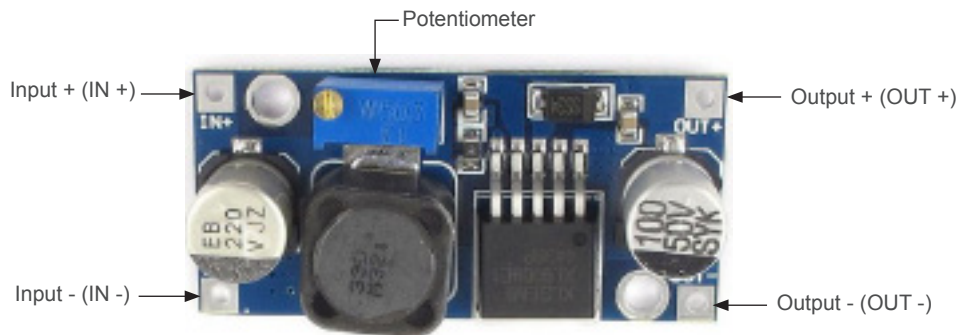
Item	Value	Remarks
Description	Step-up (boost)	
Power	20W	Input max.
Input range	3V ~ 32V	
Output range	5V ~ 35V	Output voltage must be at least 1.5V higher than input voltage.
Output current	0 ~ 0.5A	
Working temperature	-40°C ~ +85°C	If working temperature is higher than 40°C working power should be 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	43 x 21 x 14 mm	
Weight	11g	
Connection mode	Welding	
IP	IP20	
Shortcircuit	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.
No load current	18mA	With 8V input, 5V output. The higher the output voltage, and/or the higher the difference between input voltage and output voltage, the higher the no load current.
Switching Frequency	150KHz	
Output ripple	50mV	The higher the voltage or the current, the greater the ripple.
Load regulation	±0.5%	Voltage regulation: ± 2.5%

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Operation

Input		Output		P(in)	P(out)	Efficiency
V (V)	I (Ah)	V (V)	I (Ah)	W	W	%
3	1.048	12	0.2	3.144	2.4	76.34%
3.3	1.77	5.03	0.85	5.841	4.2755	73.20%
5	3.03	12	0.9	15.15	10.8	71.29%
5	2.617	24	0.4	13.085	9.6	73.37%
12	2.44	24	1.08	29.28	25.92	88.52%
11.9	1.98	30.5	0.67	23.562	20.435	86.73%
25	0.65	30	0.5	16.25	15	92.31%

Use mode



- 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.

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.
- Secure and no risk of falling.