

DCDC-RED190-8A

200W high-performance switching buck module



This is a high-performance switching buck module with 7.5A current.

The module is the second generation of high-frequency switching technology and uses TPS40052 core chip.

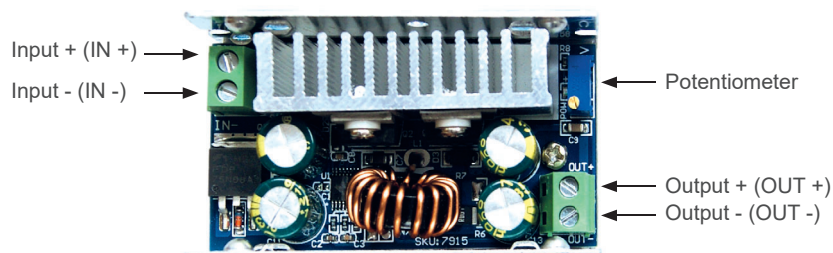
Features

Item	Value	Remarks
Description	Step-down (buck)	
Power	200W	Input max.
Input range	8V ~ 55V	
Output range	1.6V ~ 36V	
Output current	0 ~ 10A	Peak of 10A.
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	<95%	The smaller the difference between the input and output voltage, the higher the efficiency.
Dimensions	70 x 39 x 31 mm	
Weight	63,41g	
Connection mode	Terminals	
Waterproof	IP20	
Shortcircuit protection	No	Fuses and protection circuits must be installed on the input side.
Input reverse polarity protection	Yes	
Temperature protection	No	
Peak current	10A	
Switching frequency	180KHz	

Operation

Input		Output		P(in)	P(out)	Efficiency
V (V)	I (Ah)	V (V)	I (Ah)	W	W	%
55,013	3,599	35,4	5,3	197,991787	187,62	94,76%
55	0,073	1,5	1,8	4,015	2,7	67,25%
48,007	3,76	23,93	7	180,50632	167,51	92,80%
48	2,16	12,28	7,5	103,68	92,1	88,83%
48	1,109	5	8	53,232	40	75,14%
24	4,196	12,2	7,5	100,704	91,5	90,86%
24	1,933	5	7,5	46,392	37,5	80,83%
24	1,959	3,3	10	47,016	33	70,19%
12	5,22	4,963	10	62,64	49,63	79,23%
12	3,8	3,3	10	45,6	33	72,37%
8	8,078	4,95	10	64,624	49,5	76,60%
8	5,83	3,3	10	46,64	33	70,75%

User 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.
- Set output voltage before connecting load.
- 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.