

Handson Technology

User Guide

1.25-30V~10A Buck-Boost DC-DC Converter

This auto step-up/step-down DC-DC converter can deliver up to 150W continuously with efficiency of greater than 90%. This type of DC/DC converter allowing the electrical output potential (voltage) at its output to be greater than, less than, or equal to that at its input voltage. Ideal for USB power bank or battery operated projects requiring a higher or lower regulated output power supply. The applications include LED drivers, Solar battery chargers, robotic car and regulated variable power supply. This converter operated in buck-boost topology, i.e. step down or step-up converter in same board.





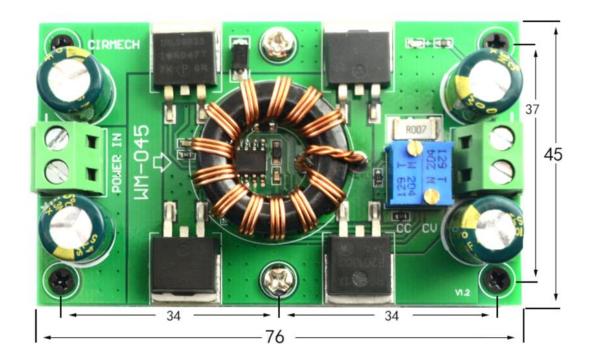
SKU: PSU1033

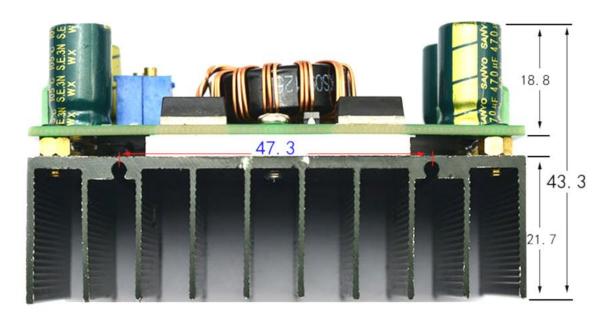
Brief Specification:

- Input voltage: 5Vdc ~ 30Vdc.
- Switching Topology: Buck-Boost (auto step-up/step-down).
- Output Voltage: 1.25~30Vdc (Adjustable).
- Output Current: 10A (MAX).
- Output Power: 150W, 300W(MAX).
- Conversion efficiency: 90% Max.
- Ripple and Noise: 200mVp-p.
- No-load Current: 6mA typical.
- Voltage Regulation: ± 0.5%.
- Load Regulation: ± 0.5%.
- Dynamic Response Speed: 300uS.
- Size LxWxH: (76x45x73) mm.

Mechanical Dimension:

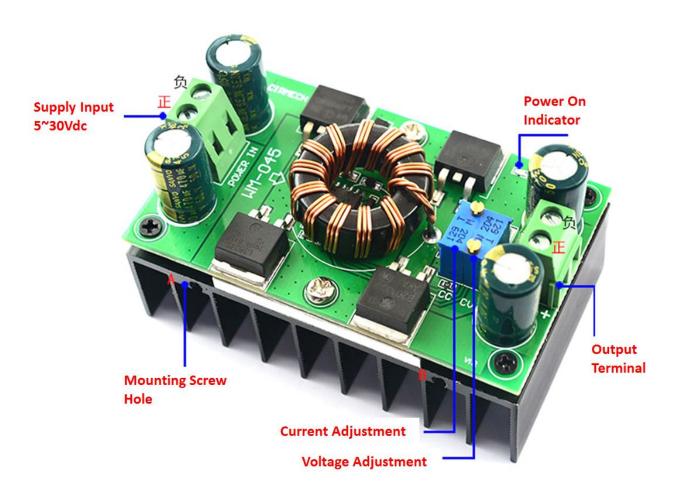
Unit: mm





Propose to add a cooling fan if operating continuously with load current of more than 10A.

Functional Block Diagram:





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