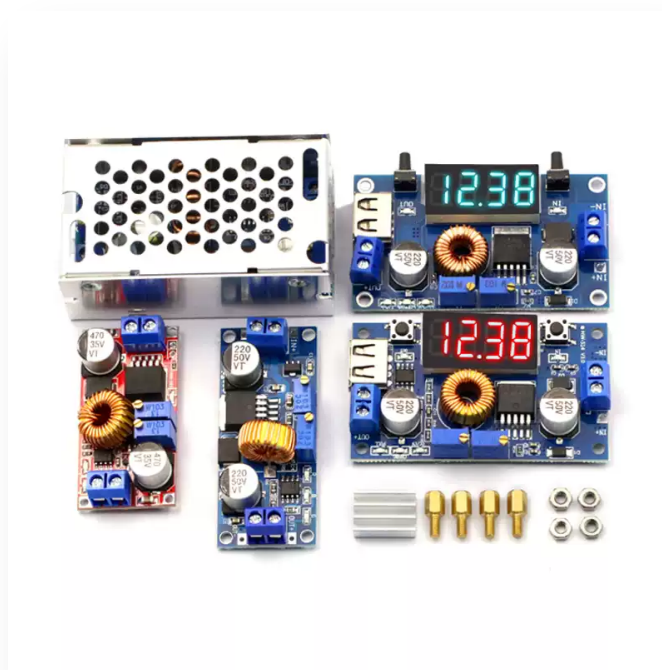


5 A Constant-Voltage / Constant-Current Buck Converter

Adjustable DC-DC step-down supply for LEDs and battery charging



Product Overview

A compact power-electronics module documented from the supplied archived product page. The specifications below separate confirmed ratings from operating guidance and identify the exact module variant where the source page contains multiple options.

Electrical and Mechanical Specifications

Parameter	Value
Conversion type	Non-isolated DC-DC buck converter
Input voltage	4-38 VDC; at 4 V input, output-current adjustment requires at least 6.5 V supply
Adjustable output	1.25-32 VDC
Maximum output current	5 A adjustable
Maximum output power	75 W
Peak efficiency	Up to 96%
Switching frequency	180 kHz
Operating temperature	-40 to +85 C
Short-circuit protection	Current limited to approximately 8 A
Board dimensions	Approximately 61.7 x 26.2 x 15 mm

Key Features

- Independent CV and CC adjustment
- Up to 5 A / 75 W output class
- Up to 96% peak efficiency
- Short-circuit and over-temperature protection

Operating Notes

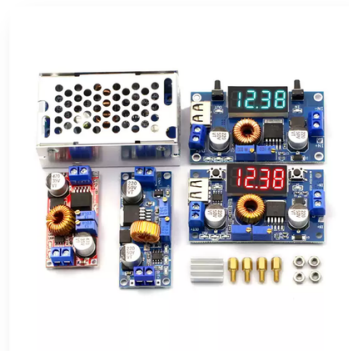
- Set voltage and current limits before connecting a battery or LED load.
- This is a buck-only converter; output must remain below input.
- High-current operation requires adequate airflow and low-resistance wiring.

Application and Connection Guide

APPLICATION & CONNECTION

HIGHER DC INPUT

4-38 VDC



LED / BATTERY / LOAD

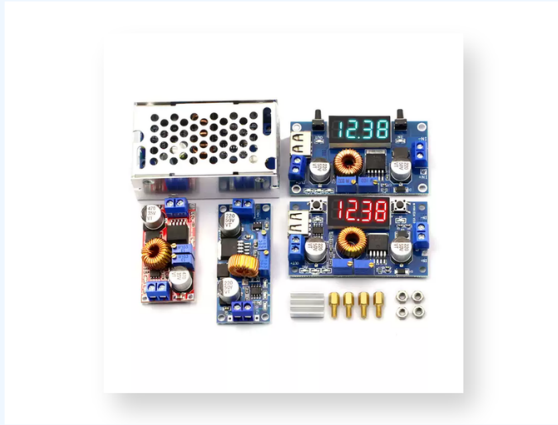
1.25-32 VDC

Verify polarity and configure voltage/current before connecting the load.

Connection Sequence

1. Confirm the input source is within the stated range. 2. Verify input and output polarity. 3. Configure voltage and current limits with the load disconnected. 4. Connect the load or battery. 5. Monitor temperature during initial operation.

KEY PRODUCT ADVANTAGES



1 Independent CV and CC adjustment

2 Up to 5 A / 75 W output class

3 Up to 96% peak efficiency

4 Short-circuit and over-temperature protection