

12 A CC/CV Adjustable Buck Converter

High-power step-down board with LED-drive and charging variants



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
Topology	Non-isolated DC-DC buck converter
Input voltage	7-32 VDC
Adjustable output	0.8-28 VDC; updated variant stated as 1.2-35 VDC
Maximum output current	12 A
Recommended continuous current	8-9 A with cooling
Constant-current range	0.2-12 A on CC variant
Maximum output power	300 W
Peak efficiency	Up to 95%
Switching frequency	180 kHz
Board dimensions	65 x 59 x 37 mm
Variants	With constant-current control or voltage-only

Key Features

- 12 A maximum current class
- CC/CV and voltage-only variants
- Integrated LED-drive capability
- Large dual-heatsink construction

Operating Notes

- Confirm whether the purchased board is the CC/CV or voltage-only variant.
- This is a buck converter; output must remain below input.
- Set voltage and current before connection and use forced air at sustained high load.

Application and Connection Guide

APPLICATION & CONNECTION

HIGHER DC INPUT

7-32 VDC



LED / BATTERY / LOAD

Adjusted lower DC output

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 12 A maximum current class**
- 2 CC/CV and voltage-only variants**
- 3 Integrated LED-drive capability**
- 4 Large dual-heatsink construction**