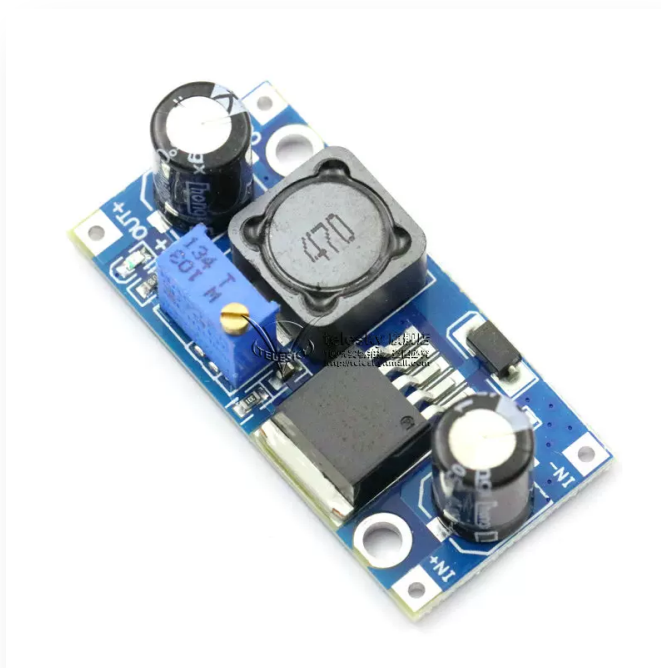


LM2596S-ADJ Adjustable Buck Converter Module

3 A DC-DC step-down power module



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 asynchronous buck converter
Input voltage	3.2–40 VDC
Adjustable output	1.25–35 VDC
Maximum output current	3 A
Recommended continuous current	Up to 2.5 A with suitable thermal conditions
Peak efficiency	Up to 92%
Switching frequency	150 kHz
Maximum output ripple	30 mV
Load regulation	±0.5%

Key Features

- Wide adjustable output range
- Up to 3 A output capability
- Compact screw-terminal module
- High efficiency for DC conversion

Operating Notes

- Set the output voltage before connecting a sensitive load.
- Use additional heatsinking when output power exceeds 10 W.
- Output voltage must remain below the input voltage.

Application and Connection Guide

APPLICATION & CONNECTION

DC SOURCE

3.2-40 VDC



REGULATED LOAD

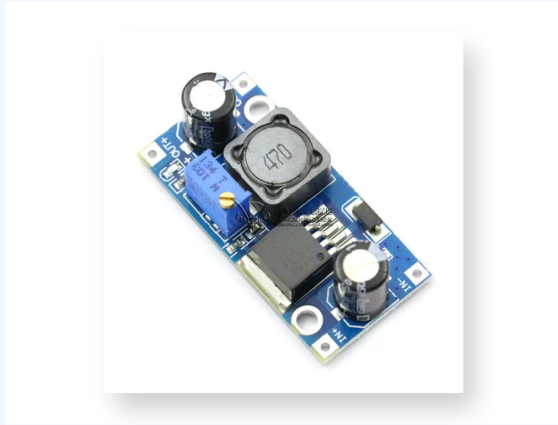
1.25-35 VDC

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 **Wide adjustable output range**
- 2 **Up to 3 A output capability**
- 3 **Compact screw-terminal module**
- 4 **High efficiency for DC conversion**