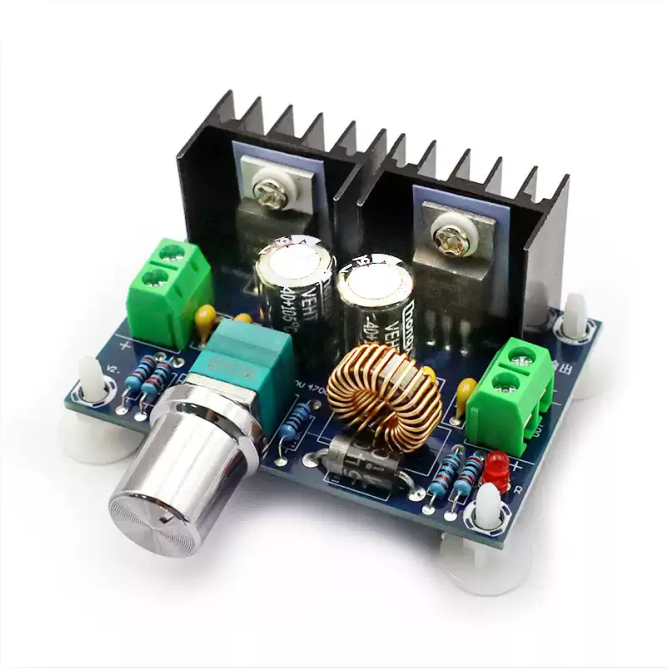
XL4016E1 8 A Adjustable Buck Converter

High-power PWM step-down module with integrated heatsink



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
Controller	XL4016E1
Topology	Non-isolated PWM buck converter
Input voltage	4-40 VDC
Adjustable output	1.25-36 VDC
Maximum output current	8 A
Maximum output power	200 W
Conversion efficiency	Up to 94%
Switching frequency	180 kHz
Protection	Over-current, over-temperature and short-circuit protection

Key Features

- 8 A / 200 W power class
- Wide 1.25-36 V adjustment
- Up to 94% efficiency
- Large heatsink and protection functions

Operating Notes

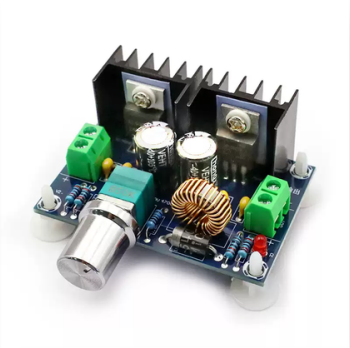
- Maximum ratings require strong airflow and low-resistance wiring.
- Set output voltage before connecting the load.
- Output must remain below input voltage.

Application and Connection Guide

APPLICATION & CONNECTION

HIGHER DC INPUT

4-40 VDC



LOWER-VOLTAGE LOAD

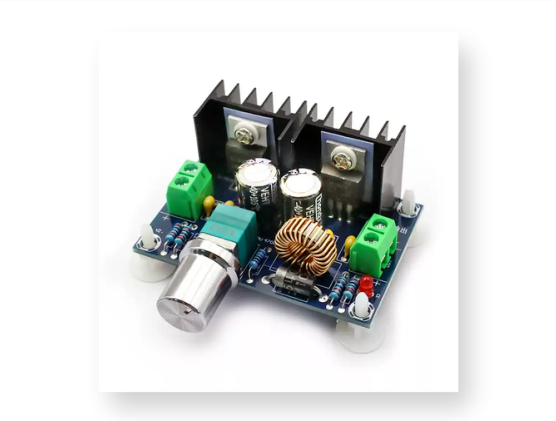
1.25-36 VDC

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. **8 A / 200 W power class**
2. **Wide 1.25-36 V adjustment**
3. **Up to 94% efficiency**
4. **Large heatsink and protection functions**