

S09 5 V Automatic Buck-Boost Regulator Module

Compact 3-15 V input regulator with fixed 5 V output



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
Model	S09
Conversion type	Automatic DC-DC step-up / step-down
Input voltage	3-15 VDC
Output voltage	5 VDC fixed
Maximum output current	600 mA
Maximum efficiency	75%
Output accuracy	+/-0.1 V
Quiescent current	<200 μ A
Switching frequency	1.2 MHz
Operating temperature	-20 to +85 C
Installation	Solder pads or 2.54 mm pin header
Board dimensions	Approximately 19 x 14 mm

Key Features

- Automatic step-up / step-down conversion
- Fixed regulated 5 V output
- Low quiescent current below 200 μ A
- Compact 19 x 14 mm footprint

Operating Notes

- The module is non-isolated.
- Keep the input at or below the 15 V maximum.
- Available output current depends on input voltage, cooling and source capability.

Application and Connection Guide

APPLICATION & CONNECTION

VARIABLE DC INPUT

3-15 VDC



5 V ELECTRONICS

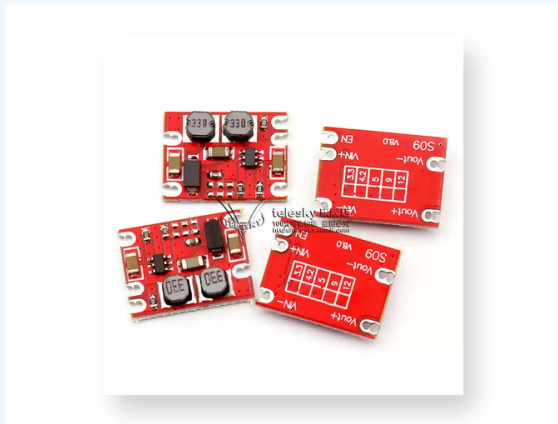
Up to 600 mA

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 **Automatic step-up / step-down conversion**
- 2 **Fixed regulated 5 V output**
- 3 **Low quiescent current below 200 μ A**
- 4 **Compact 19 x 14 mm footprint**