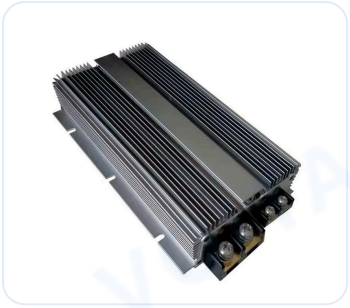
Step-up DC-DC Converter — 220 × 130 × 50 mm Case, 24 V to 48 V Output

Mid-size step-up converter for 12 V DC systems: 9–16 V DC input, 24–48 V DC output at 30 A to 60 A, in one sealed IP67 case with paired INPUT and OUTPUT studs.



KEY FEATURES

- Input **DC 12 V (9–16 V)**
- Outputs at **24 V / 28 V / 48 V**, held to ± 0.25 V
- **30 A to 60 A** in this case — 1400 W to 1680 W
- **220 × 130 × 50 mm** finned heat-sink case, **2.2–2.3 kg**
- **90 % transfer efficiency** at rated load
- **IP67** — dust-tight, immersion to 1 m for 30 min
- Over-current and over-heating protection, cut-off at 150 °C
- Working temperature **−20 °C to 85 °C**; certified to **CE, FCC and RoHS**

MODELS BUILT IN THIS CASE

Model	Input version	Output current	Output power
12V-24V	12 V (9–16 V)	60 A	1440 W
12V-28V	12 V (9–16 V)	50 A / 60 A	1400 W / 1680 W
12V-48V	12 V (9–16 V)	30 A	1440 W

Ordering model = voltage pair + current rating, e.g. **12V-28V 60A**. Output power is the rated output voltage multiplied by the output current. Other voltage pairs of the same series are built in the 66 × 58 × 23 mm, 74 × 74 × 32 mm, 100 × 80 × 38 mm and 220 × 127 × 63 mm cases.

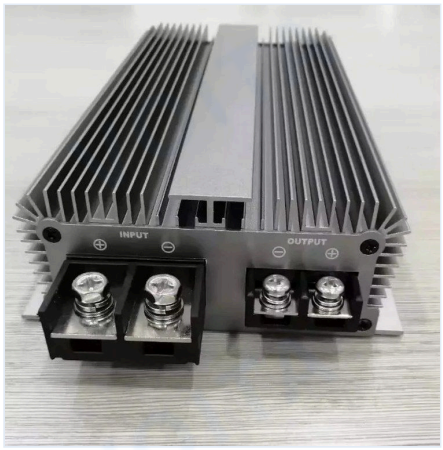
ELECTRICAL SPECIFICATION

Input voltage	DC 12 V (9–16 V)
Output voltage	24 V / 28 V / 48 V, held to ± 0.25 V
Output current	30 A to 60 A in this case
Output power	1400 W to 1680 W in this case
Transfer efficiency	90 % typical at rated load
Protection	Over-current, over-heating; cut-off at 150 °C
Working temperature	−20 °C to 85 °C

Ripple and noise, no-load input current and MTBF are not published for this case size — available on request.

MECHANICAL AND COMPLIANCE

Case size (mm)	220 × 130 × 50
Net weight	2.2–2.3 kg
Housing	Finned aluminium extrusion, sealed
Terminals	Four threaded studs — INPUT pair and OUTPUT pair, marked + and −
Mounting	Slotted holes along both long flanges
Ingress protection	IP67 — sealed housing, no vents or fan intake
Certification	CE, FCC, RoHS
Warranty	2 years standard, extendable by agreement



End face — INPUT pair (left) and OUTPUT pair (right).

Dimensional drawing: available on request.

Custom requirements. If the model you need is not listed, send input range, output voltage, output current, case or connector preference and quantity — we will quote a customized build.

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