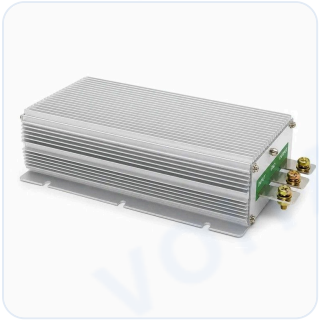
Step-up DC-DC Converter — 220 × 127 × 63 mm Case, 24 V to 48 V Output

High-current step-up converter for 12 V and 24 V DC systems: 9–16 V or 18–45 V DC input, 24–48 V DC output at 20 A to 50 A, in one sealed IP67 case with screw terminals.



KEY FEATURES

- Two input versions — **12 V (9–16 V)** or **24 V (18–45 V)** DC
- Outputs at **24 V / 28 V / 48 V**, held to ± 0.25 V
- **20 A to 50 A** in this case — 960 W to 1920 W
- **220 × 127 × 63 mm** finned heat-sink case, 2.3–2.5 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
- Screw terminals marked **INPUT / GND / OUTPUT**; CE, FCC and RoHS

MODELS BUILT IN THIS CASE

Model	Input version	Output current	Output power
12V-24V	12 V (9–16 V)	50 A	1200 W
12V-28V	12 V (9–16 V)	40 A	1120 W
12V-48V	12 V (9–16 V)	20 A	960 W
24V-48V	24 V (18–45 V)	40 A	1920 W

Ordering model = model prefix + current rating, e.g. **12V-24V 50A**. Output power is the rated output voltage multiplied by the output current. Higher currents of the same voltage pair are built in the 220 × 130 × 50 mm, 300 × 195 × 90 mm and other cases.

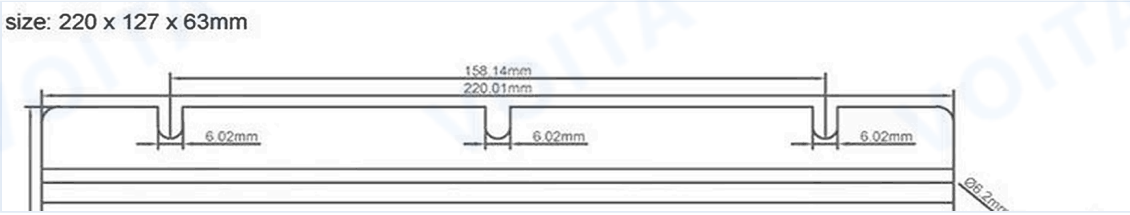
ELECTRICAL SPECIFICATION

Input voltage	DC 12 V (9–16 V) or DC 24 V (18–45 V) — two input versions
Output voltage	24 V / 28 V / 48 V, held to ± 0.25 V
Output current	20 A to 50 A in this case
Output power	960 W to 1920 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 × 127 × 63
Housing	Finned aluminium extrusion, sealed
Terminals	Three threaded studs, marked INPUT / GND / OUTPUT
Mounting slots	6.02 mm wide, hole Ø6.2 mm — see drawing below
Net weight	2.3–2.5 kg depending on rating
Ingress protection	IP67 — sealed housing, no vents or fan intake
Certification	CE, FCC, RoHS
Warranty	2 years standard, extendable by agreement



Mounting slots, top edge (mm) — overall 220.01, slot span 158.14, slot width 6.02, hole Ø6.2.

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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