Step-up DC-DC Converter — 220 × 156 × 65 mm Case, 36 V to 48 V Output

High-power step-up converter for 12 V and 24 V DC systems: 9–16 V or 18–45 V DC input, 36–48 V DC output at 40 A to 80 A, in one sealed IP67 case.

KEY FEATURES

- Two input versions — **12 V (9–16 V)** or **24 V (18–45 V)** DC
- Outputs at **36 V / 48 V**, held to ± 0.25 V
- **40 A to 80 A** in this case — 1800 W to 3840 W
- **220 × 156 × 65 mm** finned heat-sink case, 2.9 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-36V	12 V (9–16 V)	50 A	1800 W
12V-48V	12 V (9–16 V)	40 A	1920 W
24V-48V	24 V (18–45 V)	80 A	3840 W

Ordering model = model prefix + current rating, e.g. **24V-48V 80A**. 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) or DC 24 V (18–45 V) — two input versions
Output voltage	36 V / 48 V, held to ± 0.25 V
Output current	40 A to 80 A in this case
Output power	1800 W to 3840 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 × 156 × 65
Housing	Finned aluminium extrusion with mounting flanges, sealed
Connections	End face: one pair of screw terminals plus red and black covered studs
Net weight	2.9 kg
Ingress protection	IP67 — sealed housing, no vents or fan intake
Certification	CE, FCC, RoHS
Warranty	2 years standard, extendable by agreement

CASE VIEWS

Front, side, top and terminal face of the 220 × 156 × 65 mm case. The flanges carry slotted mounting holes along both long edges. A dimensional drawing is 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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