Step-down DC-DC Converter — 100 × 80 × 38 mm Case, 9–90 V to 5–24 V

Step-down (buck) converter for 9–90 V DC systems, supplying 5–24 V at 20 A to 50 A in one sealed aluminium case.

KEY FEATURES

- Input versions — **12 V / 24 V (9–32 V), 24 V (18–32 V), 48 V (30–60 V), 60 V / 72 V (30–90 V)**
- Outputs at **5 V / 12 V / 13.8 V / 24 V**, held to ± 0.25 V
- **20 A to 50 A** in this case — 200 W to 720 W
- **100 × 80 × 38 mm** finned heat-sink case, **0.5 kg**
- **93 % transfer efficiency** at rated load
- **IP67** — dust-tight, immersion to 1 m for 30 min
- Short-circuit, over-current, over-voltage and over-temperature protection
- Certified to **CE, FCC and RoHS**

MODELS BUILT IN THIS CASE

Model	Input version	Output current	Output power
12V/24V-5V	12 V / 24 V (9–32 V)	40 A / 50 A	200 W / 250 W
24V-12V	24 V (18–32 V)	30 A / 40 A	360 W / 480 W
24V-13.8V	24 V (18–32 V)	30 A / 40 A	414 W / 552 W
48V-12V	48 V (30–60 V)	30 A	360 W
48V-24V	48 V (30–60 V)	20 A / 30 A	480 W / 720 W
48V-13.8V	48 V (30–60 V)	30 A	414 W
60/72V-12V	60 V / 72 V (30–90 V)	20 A	240 W
72V-24V	60 V / 72 V (30–90 V)	20 A	480 W

Ordering model = model prefix + current rating, i.e. **12V/24V-5V 40A**. Output power is the rated output voltage multiplied by the output current. All models use the same 100 × 80 × 38 mm case.

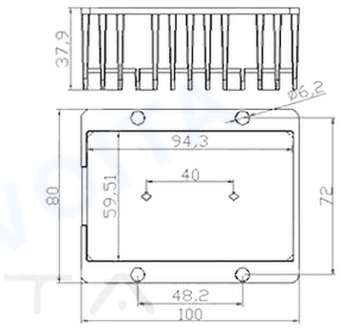
ELECTRICAL SPECIFICATION

Input voltage	DC 12 V / 24 V (9–32 V) or DC 24 V (18–32 V) or DC 48 V (30–60 V) or DC 60 V / 72 V (30–90 V)
Output voltage	5 V / 12 V / 13.8 V / 24 V, held to ± 0.25 V
Output current	20 A to 50 A in this case
Output power	200 W to 720 W in this case
Transfer efficiency	93 % typical at rated load
Protection	Short-circuit, over-current, over-voltage, over-temperature

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)	100 × 80 × 38
Net weight	0.5 kg
Ingress protection	IP67 — sealed housing, no vents or fan intake
Working temperature	-40 °C to +80 °C
Storage temperature	-40 °C to +100 °C
Working humidity	10 % to 90 % RH
Certification	CE, FCC, RoHS
Warranty	2 years standard, extendable by agreement



Plan view, dimensions in mm.

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

© 2026 Guangzhou VOITA Electronic Technology Co., Ltd. · www.voitatech.com

inquiry@voitatech.com · +86 191 5742 1386