

DC-DC Converter

The bidirectional DC-DC converter is engineered to withstand demanding road conditions, ensuring both durability and high-performance efficiency, making it ideal for RV adventures.



Automotive-Grade Design for Rugged Mobile Environments



IP67 Ingress Rating for Strong Environmental Adaptability



High Efficiency & Reduced Switching Losses



Wide Operating Temperature Range



Technical Specifications

Model

XDC2500-24

BN48 Voltage Range	38 - 40 V (Derated, 38 V is required to be half load); 40 - 54 V (Full Load); 54 - 58 V (Derated)
BN24 Voltage Range	24 - 28 - 30 V (Input voltage must be 8 V higher than output voltage)
Max Rated Power @Buck Mode	2.5 kW (89 A)
Max Rated Power @Boost Mode	2.5 kW (52 A)
Output Rated Current @Buck Mode	89 A @28 V
Output Rated Current @Boost Mode	52 A @48 V
Peak Efficiency Range	≥94%, Boost: ≥90% @21 A, 48 V
Control Accuracy	Voltage: ±1% @Rated, Current: ±2% @Rated, Current: ±2% @Rated
CAN Communication	CAN2.0 (CAN speed: 500 kbps)
Ingress Rating	IP67
Altitude	<4,500 m
Storage Temperature Range	-40 ~ 120 °C
Operating Temperature Range	< -40 °C, the output is off; ≥-40 - ≤55 °C, can be full power output; >55 - ≤85 °C, linear derated output 2,500 W - 0 W; >85 °C, the output is off.
Cooling	Forced Air
Dimension (L x W x H)	238 x 175 x 75 mm (9.37 x 6.89 x 2.95 inch)
Weight	≤3 kg (6.61 lbs)

1. All pictures shown are for reference only and data are based on ROYPOW standard test procedures.

2. Actual performance may vary according to local conditions. Only authorized personnel are allowed to operate or make adjustments to the batteries.

3. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice.

4. Technical data and illustrations are not binding. We assume no liability for misprints.