



DUC Series

DC-DC Battery Charger



Product Overview

The DUC Series integrates three operating modes: charging mode, power supply mode, and reverse charging mode, providing flexible power management for various applications.

In charging mode, the input side employs start/stop detection logic, compatible with smart Euro 6 alternators and conventional alternators.

In power supply mode, it provides a wide-range regulated output, allowing the charger output to directly run loads.

In reverse charging mode, it enables a domestic battery to charge a starter battery, helping maintain starter battery readiness and ensuring reliable vehicle starting.

With RS485 and CAN communication interfaces, RV-C protocol support, and optional WiFi/4G connectivity, the DUC Series enables convenient monitoring and system management through App and cloud platforms. Comprehensive protection functions support reliable operation in RV dual-battery systems.

Features

Flexible Power Management

- Multiple operating modes
- Start/stop detection
- Smart Euro 6 & conventional alternator support
- Stable lithium battery self-activation function

Reliable Operation

- Natural cooling for low noise
- RS485/CAN communication
- Comprehensive electronic protection
- IEC62477-1 & EMC compliant



»» Technical Specifications

Model	DUC3011	DUC4011	DUC5011
Rated Voltage	12V-12V		
Input Voltage Range	9 ~ 17V		
Output Charging Voltage Range	10 ~ 17V		
Output Voltage Error Range	±1%		
Input and Output Current Range	1 ~ 30A	1 ~ 40A	1 ~ 50A
Max. Output Power	420W	560W	700W
Max. Efficiency	≥98.3%	≥98.5%	≥98.1%
Standby Current Losses	10mA	10mA	11mA
Communication Method	CAN (RV-C Protocol) / RS485 (5VDC / 300mA)		
Operating Temperature	-20°C to +60°C (>40°C derating)		
Altitude	2000m		
Relative Humidity	≤95% (N.C.)		
Ingress Protection	IP32		
Dimensions (L × W × H)(mm)	189×181×64.5	191×181×76.5	191×181×76.5
Weight	1.08	1.37	1.45