



50A DC-DC BATTERY CHARGER WITH MPPT



RENOGY 50A DC-DC BATTERY CHARGER WITH MPPT

Renogy's DCC50S DC to DC MPPT on-board Battery Charger is designed to give you options! This multi-stage, multi-input battery charger can charge a service battery from an alternator connected to a starting battery or by utilizing solar panels connected directly to the unit. While your vehicle's alternator prioritizes your starting battery, this unit will allow your solar system to charge your service battery first! It's the smart way to keep yourself fully charged and off-grid longer! And with multi-stage charging and multi-chemistry functionality, Renogy's DC to DC MPPT Charger has you covered whether you're using Flooded, Gel, AGM, or Lithium batteries.

KEY FEATURES

- Designed to charge service batteries from two DC inputs —solar panels and alternator
- Built-in Maximum Power Point Tracking (MPPT) to maximize the solar power
- 3-phase charging profile (Bulk, Boost, and Float) ensures your service battery will be accurately charged at the correct voltage levels to 100%
- Built-in Voltage Sensitive Relay (VSR) for easy setup with traditional alternators
- Compatible with smart alternators (with variable output voltage)
- Trickle charges the starting battery via solar panels if the service battery is fully charged
- Isolation of the starting battery and the service battery
- Temperature and voltage compensation features prolong battery life and improve system performance
- Smart Protection Features: battery isolation, over-voltage protection, battery temperature protection, over-current protection, overheat protection, reverse current protection, solar panel and alternator reverse polarity protection
- Compatible with multiple battery types: AGM, GEL, Flooded, and Lithium
- Compact with a sturdy design, it was built tough for all conditions

Technical Specifications

Model	DCC50S
System Voltage	12VDC
Battery Voltage Range	9~16VDC
Maximum Charging Current	50A
Battery Type	SLA, GEL, FLD, LI, USER
Service Battery Charging Mode	MPPT
Charging Efficiency	Up to 97%
Maximum Solar Input Voltage	25V
Maximum Solar Input Power	660W
Alternator Input Voltage	Traditional Alternator: 13.2-16VDC Smart Alternator (Euro 6): 12-16VDC
Max Alternator Input Power	660W
Temperature Compensation Coefficient	-3mV / °C / 2V
Self-consumption	60mA
Operating Temperature Range	-35°C~65°C / -31°F~149°F
Storage Temperature Range	-40°C~80°C / -40°F~176°F
Humidity Range	0%~95% (NC)
Dimensions	234 * 146 * 77 mm / 9.2 * 5.8 * 3.0 in
Weight	1.42 kg / 3.13 lb
Terminal Size	M8
Communication Protocol	RS485
Grounding	Common Negative

