

### Description

The RENOGY 12V/24V 50A IP67 DC-DC Battery Charger with MPPT supports dual input charging from vehicle alternators and solar panels for 12V/24V battery systems. Intelligent buck-boost charging logic automatically prioritizes solar power while maintaining stable output from the alternator or generator.

Rated at 50A with up to 720W output, the charger safely delivers reliable, efficient charging for house batteries in RV, marine, and other mobile power applications. The slim, IP67-rated waterproof enclosure allows flexible installation in tight or exposed spaces while ensuring continuous operation in harsh environments.

### Key Features

#### Intelligent Dual-Charging Mode

Automatically switches between starter battery and solar/generator inputs, prioritizing solar power for optimal house battery charging.

#### High-Power Output

Rated 50A with up to 720W output for efficient house battery charging and reverse charging to the starter battery.

#### Bluetooth & CAN Monitoring

Supports real-time system data monitoring via optional Bluetooth and wired CAN communication.

#### Compact & Durable Design

Lightweight, IP67-rated waterproof enclosure ensures flexible and safe installation.

#### Wide Operating Temperature

Operates from -31°F to 212°F / -35°C to 100°C, supporting full output up to 131°F / 55°C.

### Recommended Accessories

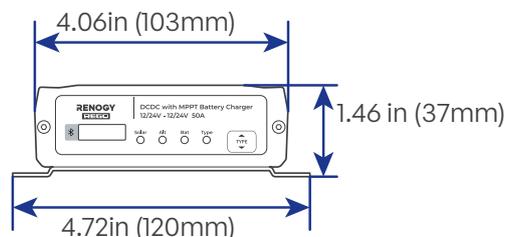
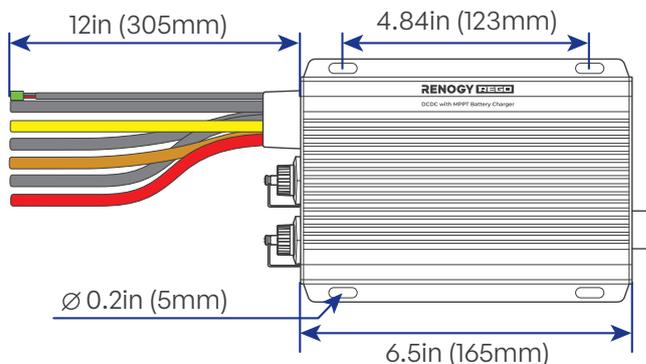


#### Renogy One Core (RSHGWSN-WO2W)

An all-in-one solution for local/remote energy monitoring and analysis.



### Product Dimensions



## Technical Specifications

### Electrical Specifications

Model	RBC2125DS-21W
System Voltage	12V/24V to 12V/24V DC
Battery Voltage Range	9V-32V DC
Maximum Charging Current	50A
Battery Types	SLD, AGM, GEL, FLD, LI, and USER
Auxiliary Battery Charging Mode	MPPT
Charging Efficiency	Up to 94%
Maximum Solar Input Voltage	50V
Maximum Solar Input Power	720W
Alternator Input Voltage	Traditional Alternator: 13.2V to 16V DC, Smart Alternator (Euro 6): 12V to 16V DC
Maximum Alternator Input Power	720W
Temperature Compensation	-3mV / °C / 2V
No-Load Current Consumption	<100mA

### Mechanical Specifications

Grounding	Common Negative
Terminal Size	Self-Contained Cable
Operating Temperature	-31°F to 212°F / -35°C to 100°C
Storage Temperature	-40°F to 212°F / -40°C to 100°C
Operating Humidity	0% to 95% RH, No Condensation
Cooling	Natural Cooling
IP Rating	IP67
Communication	RV-C & Bluetooth
Dimensions (LxWxH)	7.01 x 4.78 x 1.47in / 178.2 x 121.5 x 37.5mm
Weight	3.35 lbs / 1.52kg
Certifications	CE, R10, FCC
Warranty	5-Year

### Package Contents

Battery Temperature Sensor	Yes (x1)
Mounting Screws	Yes (x4)
Quick Guide	Yes (x1)

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