

Description

20A/40A DC-DC charger efficiently charges house batteries from vehicle starter batteries, delivering up to 94% efficiency. Advanced charging logic improves energy management while protecting battery systems.

This DC-DC charger is fully compatible with both traditional and smart generators to provide flexible vehicle power configurations. Optional monitoring via the Renogy app, when paired with a Bluetooth module, provides real-time system visibility for RVs, vans, and other mobile power applications.

Key Features

20A DC-DC Charger

Efficiently charges house batteries from vehicle starter batteries.

Remote Monitoring & Control

Compatible with optional BT-2 Bluetooth module for real-time monitoring and parameter adjustment.

Starter Battery Protection

Alternator run protection safeguards the vehicle starter battery.

Intelligent Temperature Management

Battery temperature sensor and automatic output reduction maintain performance in high temperatures.

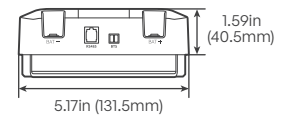
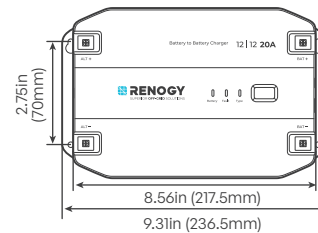
Compact & Durable Design

Corrosion-resistant, compact construction supports installation in small spaces and humid marine environments while advanced electronic protections ensure safe operation.

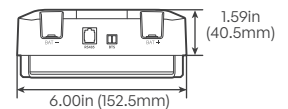
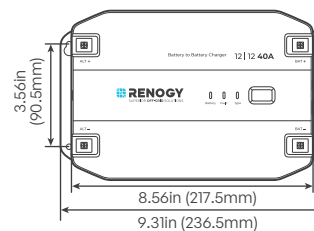


Product Dimensions

20A DC-DC Battery Charger (RBC20D1U)



40A DC-DC Battery Charger (RBC40D1U)



Recommended Accessories



BT-2 Bluetooth Module

Enables remote monitoring and control via Bluetooth with the Renogy App.



Renogy One Core (RSHGWSN-W02W)

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

Technical Specifications

Electrical Parameters

Model	RBC20D1U	RBC40D1U
System Voltage	12V-12V	12V-12V
Rated Charge Power	300W	600W
Rated Charge Current	20A	40A
Input Voltage Range	9V-16V	9V-16V
Output Voltage Range	9V-16V	9V-16V
Supported Battery Type	Starter Battery: Gel Auxiliary Battery: SLD, AGM, Flooded, Lithium, and Gel; User Mode	Starter Battery: Gel Auxiliary Battery: SLD, AGM, Flooded, Lithium, and Gel; User Mode
Charge Conversion Efficiency	94%	94%
Alternator Input Voltage	Traditional Alternator: 13.2-16.0VDC Smart Alternator (Euro 6): 12-16.0VDC	Traditional Alternator: 13.2-16.0VDC Smart Alternator (Euro 6): 12-16.0VDC
Temperature Compensation	-3mV / °C / 2V	-3mV / °C / 2V
No-Load Current Consumption	<15mA	<15mA
Parallel Connection	NO	NO

Mechanical Specifications

Grounding	Common Negative	Common Negative
Operating Temperature	32°F to 140°F / -25°C to 60°C	32°F to 140°F / -25°C to 60°C
Storage Temperature	-40°F to 185°F / -40°C to 85°C	-40°F to 185°F / -40°C to 85°C
Operating Humidity	0% to 95% RH, No Condensation	0% to 95% RH, No Condensation
IP Rating	IP32	IP32
Communication	RS-485	RS-485
Installation Method	Surface Mounting	Surface Mounting
Cooling	Natural Cooling	Natural Cooling
Operating Altitude	≤3,000m	≤3,000m
Noise	<40dB	<40dB
Dimensions (LxWxH)	9.31 x 5.17 x 2.30in / 236.5 x 131.5 x 58mm	9.31 x 6.00 x 2.30in / 236.5 x 152.5 x 58mm
Weight	2.71 lbs / 1.23kg	2.71 lbs / 1.23kg
Certifications	CE, UKCA, FCC	CE, UKCA, FCC
Warranty	2-Year	2-Year

Package Contents

Mounting Screws	Yes (x1)	Yes (x1)
Battery Temperature Sensor	Yes (x1)	Yes (x1)
IGN Signal Wire	Yes (x1)	Yes (x1)
Quick Guide	Yes (x1)	Yes (x1)

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