RENOGY

CHARGE CONTROLLER

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ROVER MPPT SOLAR CHARGE CONTROLLER

The Rover Series charge controllers are suitable for various off-grid solar applications. It protects the battery from being over-charged by the solar modules and over-discharged by the loads. The Rover's charging process has been optimized for long battery life and improved system performance. The comprehensive self-diagnostics and electronic protection functions can prevent damage from installation mistakes or system faults.

➢ Automatically detect 12V or 24V DC system voltages
➢ Deep cycle Sealed, Gel, Flooded and Lithium (12.8V LFP) battery option ready
➢ Electronic protection: Overcharging, over-discharging, overload, and short circuit
➢ Innovative MPPT technology with high tracking efficiency up to 99% and peak conversion efficiency of 98%
➢ Reverse protection: Any combination of solar module and battery, without causing damage to any component
➢ Charges over-discharged lithium batteries
➢ RS232 port to communicate with BT-1 Bluetooth module and PC

Model Option   20Amp 30Amp 40Amp

Optional Components

Renogy BT-1 Bluetooth Module

The BT-1 Bluetooth module is a great addition to any Renogy charge controllers with a RS232 port and is used to pair charge controllers with the Renogy BT App.

After pairing is done you can monitor your system and change parameters directly from you cell phone or tablet. No more wondering how your system is performing, now you can see performance in real time without the need of checking on the controller's LCD.

SPECIFICATION

Electrical Parameters

Model	RVR-20	RVR-30	RVR-40
Nominal system voltage	12V/24V Auto Recognition		
Rated Battery Current	20A	30A	40A
Rated Load Current	20A	20A	20A
Max. Battery Voltage	32V		
Max Solar Input Voltage	100 VDC		
Max. Solar Input Power	12V @ 260W	12V @ 400W	12V @ 520W
	24V @ 520W	24V @ 800W	24V @ 1040W
Self-Consumption	≤100mA @ 12V / ≤58mA @ 24V		
Charge circuit voltage drop	≤ 0.26V		
Discharge circuit voltage drop	≤ 0.15V		
Temp. Compensation	-3mV/°C/2V (default)		

General

Model	RVR-20	RVR-30/40
Dimensions	210 x 151 x 59.5mm	238 x 173 x 72.5mm
	8.27 x 5.94 x 2.34in	9.37 x 6.81 x 2.85in
Mounting Oval	7.66 x 4.70mm / 0.30 x 0.18in	
Max Terminal Size	10mm² 8AWG	10mm² 8AWG
Net Weight	1.4kg / 3.08 lb / 49.27 oz	2.0kg / 4.41 lb / 70.56 oz
Working Temperature	-35°C to +45°C , -31°F to 113°F	
Storage Temperature	-35°C to +75°C , -31°F to 167°F	
Rated Load Current	10% to 90% NC	
Humidity Range	≤ 95% (NC)	
Enclosure	IP32	
Altitude	< 3000m	
Communication	RS232	
Certification	FCC Part 15 Class B; CE; RoHS; RCM	