



36V/48V ROVER BOOST MPPT SOLAR CHARGE CONTROLLER



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The Rover Boost Controller is a 10 Amp boosting Maximum Power Point Tracking (MPPT) charge controller engineered to charge a 36V or 48V battery bank with just one to two 36-cell solar panels. This powerful controller is the perfect fit for charging batteries in places with limited space for solar, such as a golf cart. The Rover Boost features 4-stage battery charging (Bulk, Boost, Float, and Equalization) with charging presets for AGM/Sealed, Gel, Flooded, and Lithium batteries. It also supports the latest Bluetooth software, giving you the option to add a Bluetooth module for remote monitoring and setting adjustments. This handy controller has numerous battery bank, controller, and solar electronic protections for peace of mind, making it an optimized system you can trust.

KEY FEATURES

- 36V/48V Automatic System Recognition of Lead Acid Batteries.
- Adaptable to a wide solar panel input voltage for appropriate battery charging.
- Multi-Function LEDs display system information and identify any errors.
- Advanced MPPT Technology with minimum 99% tracking efficiency and 90% charge conversion efficiency.
- 4-preset battery charge profiles for AGM/Sealed, Gel, Flooded, and Lithium. User mode also available for a wide variety of applications.
- Multiple electronic protections for battery, controller, and solar—including over-charge protection, reverse polarity protection, and more!
- Bluetooth monitoring ready—add a Renogy Bluetooth Module (sold separately) and download the Renogy DC Home App for remote monitoring and customization.
- CAN Communication supports paralleling 2 x Rover Boosts in your system.

TECHNICAL SPECIFICATIONS

Model	RCC10RVRB
Rated System Voltage	36V / 48V, Auto Recognition (Non-Lithium)
Rated Charge Current	10A
Battery Operating Range	30 ~ 65 VDC
Battery Types	AGM, GEL, FLOODED, LFP, USER*
Rated Max Charge Power	PV Input Power: 500W/36V; 650W/48V Charging Power: 450W/36V; 600W/48V
Max Input Current (short-circuit, I_{sc})	35A
Power Limiting Protection	Up to 600W/36V; 800W/48V
Solar Input Voltage Range (VOC)	15 ~ 25VDC / 36V 15 ~ 40VDC / 48V
MPPT Voltage Range	15 ~ 25VDC / 36V 15 ~ 40VDC / 48V
MPPT Tracking Efficiency	≥ 99%
MPPT Charge Conversion Efficiency	≥ 90%
Idle Consumption	≤ 2W
Operating Temperature Range	-31°F ~ 149°F / -35°C ~ + 65°C
Storage Temperature Range	-40°F ~ 176°F / -40°C ~ + 80°C
Temperature Compensation	-3mV / °C / 2V (Non-Lithium) 0mV / °C / 2V; no compensation (Lithium)
Grounding Type	Common Negative Lug (M3)
Enclosure Rating	IP20
Humidity	0-95% RH
Electronic Protections	Battery overcharging, Battery over discharge, Battery reverse polarity protection, PV reverse polarity, PV Reverse flow, PV short-circuit protection, Controller internal over-temperature protection, Charging over-current protection
Communication	RS485 / CAN bus signal
Dimensions (L x W x D)	8.8 x 7.6 x 2.9 inch / 224 x 192 x 74.5mm
Weight	2.65 lbs / 1.2 Kg
Terminal Range	16 ~ 2 AWG
Terminal Size	M6-12x1
Certification	CE, FCC Part 15 Class B, RoHS