



# 30A WANDERER PWM CHARGE CONTROLLER



## RENOGY 30A WANDERER PWM CHARGE CONTROLLER

The Renogy Wanderer-Li is a 30A PWM solar charge controller that integrates efficient PWM charging to increase battery life and improve system performance. Designed with a simple interface for ease of use, the controller uses multiple LED indicators to notify users of charge status and battery information. This newly improved model has two advanced features: an RS232 port and Lithium battery charging. With the addition of the RS232 port, users can now connect and communicate with the Renogy BT-1 Bluetooth module. By adding the BT-1 to the Wanderer-Li, you can now use the smartphone app, Renogy BT, to monitor and adjust your solar system remotely. With the inclusion of the Lithium Battery Mode, the 30A negative-ground controller is now capable of charging various 12V battery types and banks, including most 12V lithium models available on the market.

### KEY FEATURES

- Optimized for 12V systems; Deep Cycle Sealed, Gel, Flooded and Lithium battery options
- Smart 4 Stage PWM charging (Bulk, Boost, Float and Equalization) and temperature compensation increases battery life and improves system performance
- Electronic Protections: Overcharging, Over-Discharging, Overload and short circuit
- Integrated RS232 port allows communication with BT-1 Bluetooth module and usage of Renogy BT smartphone app

## PARAMETERS

Nominal System Voltage	12V DC
Rated Charge Current	30A
Max. PV Input Voltage	25V DC
Battery Type	Sealed (AGM), Gel, Flooded and Lithium (LFP)
Self-Consumption	<10mA
Temperature Compensation	-3mV/°C /2
Dimensions	168 x 109 x 44mm; 6.45 x 4.31 x 1.76in
Max Terminal Size	8 AWG; 10mm <sup>2</sup>
Net Weight	0.29 kg / 0.65 lbs.
Working Temperature	-35°C to +45°C; -20 °F to 113 °F
Encloser	IP20
Communication	RS232
Certification	FCC, CE, RoHS

Battery	Gel	AGM/Sealed	Flooded	Li (LFP)
High Voltage Disconnect	16V	16V	16V	16V
Over-Voltage Reconnect	15V	15V	15V	15V
Equalization Voltage			14.8	
Boost Voltage	14.2V	14.6V	14.6V	14.2V (User: 12.6-16V)
Float Voltage	13.8V	13.8V	13.8V	
Boost Return Voltage	13.2V	13.2V	13.2V	13.2V
Low Voltage Reconnect	12.6V	12.6	12.6	12.6
Discharging Limit Voltage	10.8V	10.8V	10.8V	10.8V
Equalization Duration		2 hours	2 hours	
Boost Duration	2 hours	2 hours	2 hours	
Equalization Interval			28 Days	

\*Battery charging parameters in LI mode can be programmed using the Renogy BT App.

\*\*Default charging parameters in LI mode are programmed for 12.8V LFP battery. Before using the Wanderer to charge other types of lithium batteries, set the parameters according to the suggestions from battery manufacturer.

## OPTIONAL COMPONENTS

### NEW BT-1 Bluetooth Module (RCM-BT1)

The new BT-1 will connect to the RS232 port on the controller and unlock monitoring features through Renogy's BT App.



### Remote Temperature Sensor

Measures the temperature at the battery and uses this data for very accurate temperature compensation.

