



## PV INDICATOR

LED PATTERN	STATUS	LED PATTERN	STATUS
Off	Night time	Steady On	MPPT charging
Double flash	Day time	Fast Flash	Absorption or Equalize
Single Flash	No PV input	Slow Flash	Float Charging

## SPECIFICATIONS

ITEM	PARAMETERS
System Voltage	12/24V
No-load Loss	8ma
Max PV Input Voltage	<100V
Rated Charge Current	30A
Max PV Input Power	600W/12V;1200W/24V

## WARNINGS

	<b>Disconnect all power sources</b>	Electricity can be very dangerous. Installation should be performed only by a licensed electrician or qualified personnel.
	<b>Battery and wiring safety</b>	Observe all safety precautions of the battery manufacturer when handling or working around batteries. When charging, batteries produce hydrogen gas, which is highly explosive.
	<b>Wiring connections</b>	Ensure all connections are tight and secure. Loose connections may generate sparks and heat. Be sure to check connections one week after installation to ensure they are still tight.
	<b>Work safely</b>	Wear protective eyewear and appropriate clothing during installation. Use extreme caution when working with electricity and when handling and working around batteries.
	<b>Observe correct polarity</b>	Reverse polarity of the Battery 1 terminals will cause the controller to give a warning tone. Reverse connection of Battery 2 terminals will not cause an alarm. However, the controller will not charge or display information for Battery 2 on the LCD. The controller will not function unless Battery 1 terminals are connected to a battery with proper polarity. Failure to correct this fault could damage the controller.
	<b>Do not exceed the GP-RVC-30-MPPT max current ratings</b>	The maximum current of the solar system is the sum of parallel-connected PV module-rated short circuit Currents (Isc) multiplied by 1.25. The resulting system current is not to exceed 37.5A. If your solar system exceeds this value, contact your dealer for a suitable controller alternative.
	<b>Do not exceed the GP-RVC-30-MPPT max voltage ratings</b>	The maximum voltage of the array is the sum of the PV module-rated open-circuit voltage of the series connected modules multiplied by 1.25 (or by a value from NEC 690.7). The resulting voltage is not to exceed 35V. If your solar system exceeds this value, contact your dealer for a suitable controller alternative.

GP-RVC-30-MPPT



# SOLAR CHARGE CONTROLLER

## Quick Start Guide



NO.	DESCRIPTION	NO.	DESCRIPTION
1-5	Instance Indicators	13	Connection terminals (PV-)
6	LED Indicator (BAT2)	14	Connection terminals (PV+)
7	LED Indicator (BAT1)	15	Port for external temperature sensor
8	LED Indicator (PV)	16	Canbus communication port
9	Connection terminals (BAT2-)	17	RS485 communication port
10	Connection terminals (BAT2+)	18	Setup Key
11	Connection terminals (BAT1-)	19	Installation hole
12	Connection terminals (BAT1+)		

## INSTALLATION AND WIRING – OVERVIEW

The GP-RVC-30-MPPT should be mounted vertically in a battery box with enough ventilation and no less than 6 inches (150mm) above and below the controller. This step is vital for proper heat dissipation.

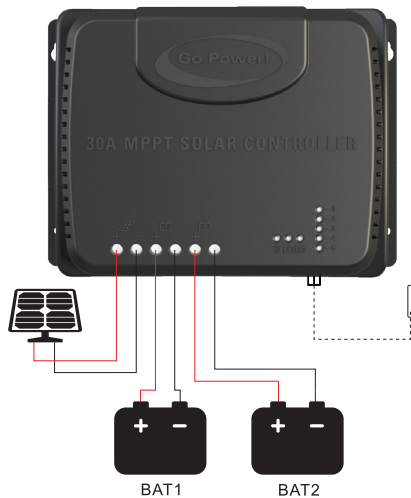
### TOOLS AND MATERIALS NEEDED

- Flathead Screwdriver (for wire terminals)
- Philips Screwdriver (for mounting screws)

### INSTALLATION STEPS

Install your solar array, and cover with opaque material until all wiring is complete. Wiring should not exceed 25ft from the solar panels to the battery.

Wire the GP-RVC-30-MPPT according to the wiring diagram below. Be sure to torque all screws based on the wire gauge after installation, as well as after 30-days.



- First: Connect the battery first, please choose cable accordingly.
- Second: Connect the solar panel
- Last: Connect the load wiring to the load (if necessary)

Mount your controller vertically, using the screws included in the box.

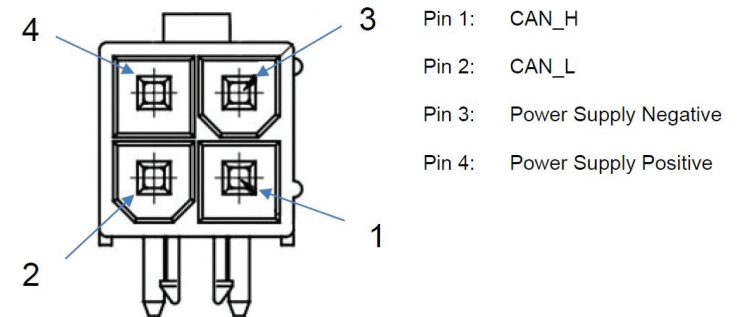
Your solar controller should now be powered on, to a default AGM battery setting. Follow the instructions on the next page to select a different battery chemistry.

## #1-5 SETTING INSTANCE

The instance of the solar controller on the RV-C network can be configured using the button and LEDs. Up to 5 unique instances are supported. To change the instance the following steps can be used.

- 1) Hold the button down for approximately 3 seconds until one of the LEDs starts flashing.
- 2) Press the button to change instance until the LED for the desired instance is flashing.
- 3) Press and hold the button for approximately 3 seconds to lock in the setting

### RV-C CONNECTOR PINOUT



### LED INDICATORS

#### #6-7 BAT INDICATOR:

LED Pattern	Status
Single Flash	No Battery
Fast Flash	Battery over voltage
Slow Flash	Battery over discharged
Steady On	Battery status is ok