



FTMRS SOLAR

# Solar panel current exceeds limit





## Overview

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Can a solar charge controller run more than 600 watts?

People fear that having more than 600W of panels will damage the solar charge controller. However, most solar charge controllers have built-in protection that will limit the charging current to max 50 Amps. Instead of limiting the solar array to 600W, you can use 800W as well.

What is the maximum input voltage for a solar panel?

To calculate the maximum input voltage, use the following equation: For example, three solar panels have a Voc of 22V each. If you have a charge controller with a maximum input of 100VDC, you can only use three solar panels in series with a Voc of 22V. You can add more solar panels in parallel to expand your solar array.

How many solar panels can I use in a series?

If you have a charge controller with a maximum input of 100VDC, you can only use three solar panels in series with a Voc of 22V. You can add more solar panels in parallel to expand your solar array. Check the datasheet of your solar charge controller for the maximum input current. Victron labels this as max pv short circuit current.

How much wattage should a solar panel have?

The way around it is to put your panels in series which boosts the voltage and also keeps the current low. Wattage is a simple Volts times Current. So if you have 350 volts and 15 amps for the panels then you have 5250 watts.



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Exceeding voltage or amps on SCC , DIY Solar Power Forum

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