

# How big a solar panel should I use for a 12v water pump

Source: <https://www.aitesigns.co.za/Sun-23-Jun-2019-5436.html>

Website: <https://www.aitesigns.co.za>

This PDF is generated from: <https://www.aitesigns.co.za/Sun-23-Jun-2019-5436.html>

Title: How big a solar panel should I use for a 12v water pump

Generated on: 2026-04-03 02:39:46

Copyright (C) 2026 AITESIGNS SOLAR. All rights reserved.

For the latest updates and more information, visit our website: <https://www.aitesigns.co.za>

-----

To run a water pump on solar, multiply the pump's power by 1.5 to calculate the total solar panel wattage needed. For example, a 1000W pump requires at least 1500W of ...

For a 1/2 horsepower pump, you'll need about eight solar panels or 800 watts of power. If you need a larger system of up to 100 horsepower, you'll require around 320 panels (each 375 ...

Takeaways For light-duty use, such as charging phones, LED lights, or a small fan, a 100W to 150W solar panel is often enough for a 12V 50Ah or 100Ah battery. However, if ...

To determine the power requirement of your pump, check the manufacturer's specifications. These details are usually provided in the product manual ...

To ensure optimal performance of your water pump, you need solar panels that match the wattage requirements of your pump. Typically, 100 to 375-watt panels are used, ...

Click Calculate, and the tool gives you results like: This means a 500W solar panel system with a 12V 150Ah battery setup would be a good fit. Simple ...

Generally speaking, it is necessary to select a water pump with a larger power and a moderate size to ensure sufficient water supply and stable water supply pressure. Choose a ...

The definitive guide to solar water pumps. We cover how they work, how to size the right panels and pump for your project, costs, and installation. Use our interactive calculator to ...

Learn how to correctly size your solar water pump system. This guide shows how to calculate the panels you

# How big a solar panel should I use for a 12v water pump

Source: <https://www.aitesigns.co.za/Sun-23-Jun-2019-5436.html>

Website: <https://www.aitesigns.co.za>

need.

.33 gallons per minute (GPM). This means you will need a pumping system that is capable of pumping at least 3.33 GPM to sustain the daily watering requirements. Due to variations in ...

To determine the power requirement of your pump, check the manufacturer's specifications. These details are usually provided in the product manual or on the pump's label.

Click Calculate, and the tool gives you results like: This means a 500W solar panel system with a 12V 150Ah battery setup would be a good fit. Simple - No technical background needed.

Web: <https://www.aitesigns.co.za>

