

Solar Storage Container Solutions

**The inverter is smaller than the
installed power**



Overview

What if my inverter is bigger than my solar array?

An inverter that is the same size (in kW) or larger than your solar array is being under-utilised. An inverter that is paired with a solar array of up to 33% higher power will be operating at maximum power for longer each day. 2. Regulatory requirements But why a 6.6kW array of solar panels with a 5kW inverter?

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What is solar inverter oversizing?

Oversizing your solar system generally means that your solar inverter is oversized for the amount of solar panels and energy output you currently have. An example of this would be if you have 4kW of solar panels but a 5kW solar inverter.

How do I choose a solar inverter size?

To calculate the ideal inverter size for your solar PV system, you should consider the total wattage of your solar panels and the specific conditions of your installation site. The general rule is to ensure the inverter's maximum capacity closely matches or slightly exceeds the solar panel array's peak power output.

Should a solar inverter be sized below the theoretical peak?

Wrong. It is quite normal and good practice to size an inverter at or below the theoretical peak of the solar array. There are sound reasons for this: The rating of a solar panel as quoted on its manufacturer's data sheet is determined using Standard Test Conditions (STC).

What does under-sizing a solar inverter mean?

Using the graph above as an example, under-sizing your inverter will mean

that the maximum power output of your system (in kilowatts – kW) will be dictated by the size of your inverter. Solar inverter under-sizing (or solar panel array oversizing) has become a common practice in Australia and is generally preferential to inverter over-sizing.

Should I buy a larger solar inverter?

Maximise STCs: Purchasing a larger inverter might negate the savings you will receive on your STCs. A smaller inverter with maximised solar panels will attract a greater return when claiming the STCs. **More efficient system:** While a solar panel may be rated for 400W of solar production, the panels will not produce this 100% during daylight hours.

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Solar Inverter Sizing: Don't violate the new CEC ...

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Should you oversize your solar array / oversize ...

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The inverter is smaller than the PV panel

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