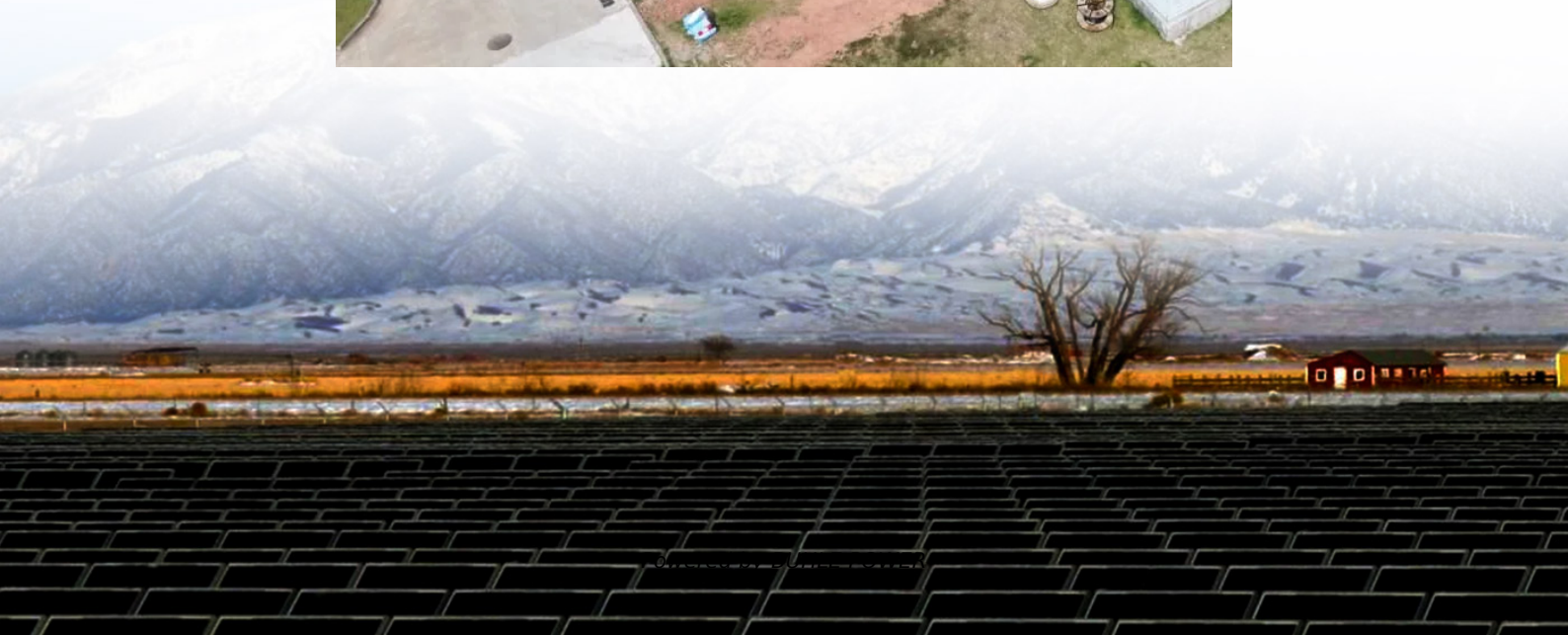


# **How big an inverter should I use for a 170kw solar**





## Overview

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A solar inverter should closely match your solar system's output in kW—typically within 80% to 120% of your total panel capacity. Too big = wasted money. Too small = wasted energy. What are the different solar inverter sizes?

Solar generators range in size from small generators for short camping trips to large off-grid power systems for a boat or house. Consequently, inverter sizes vary greatly. During our research, we discovered that most inverters range in size from 300 watts up to over 3000 watts. In this article, we guide you through the different inverter sizes.

Do I need an inverter size chart?

The need for an inverter size chart first became apparent when researching our DIY solar generator build. Solar generators range in size from small generators for short camping trips to large off-grid power systems for a boat or house. Consequently, inverter sizes vary greatly.

How do I choose a solar inverter?

Knowing your array size allows you to choose an inverter that can handle that production efficiently—without over- or under-investing in capacity. The second step is understanding your system's DC-to-AC ratio, one of the most important metrics when sizing a solar inverter.

How many inverters do you need for a 12 kW solar system?

Inverter: one or two inverters of a combined 10 kW–15 kW A 12 kW solar installation in a farm near Berlin utilized a 10 kW inverter with excellent results—saving a couple of hundred dollars on initial cost and still registering peak output. 3. Equate Load Requirements, Not Panel Watts It's not solely about sunlight—actual usage matters, too.



## How big an inverter should I use for a 170kw solar

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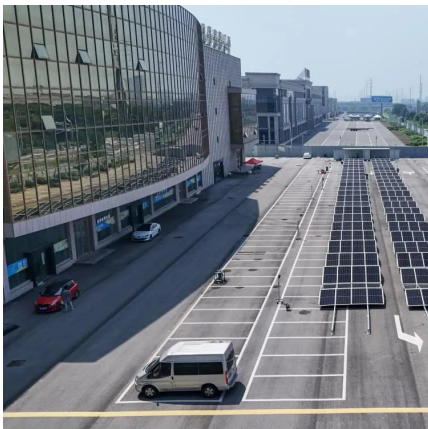


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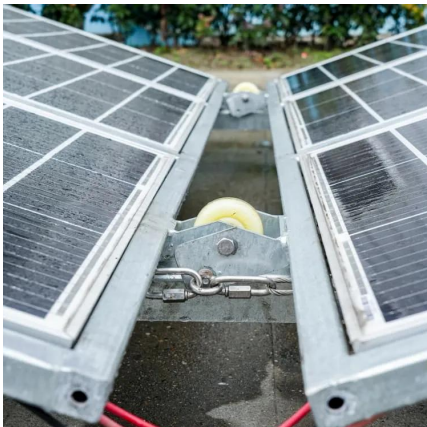
FAQ Can I use a 3000W inverter with a 200Ah battery? Only if it's a 24V lithium system. For 12V lead-acid,  $200\text{Ah} \times 12\text{V} \times 0.5\text{C} = 1200\text{W}$  max. How long will a 100Ah battery last with a 1000W ...





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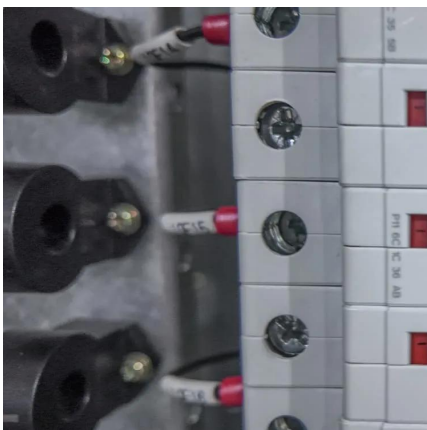
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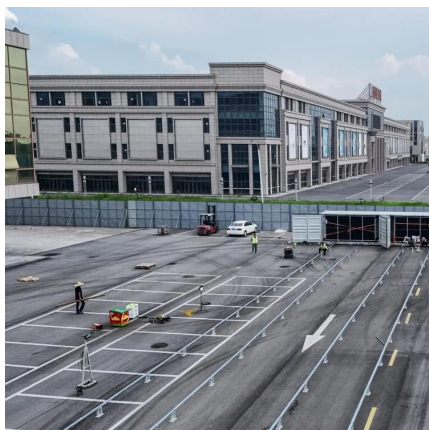
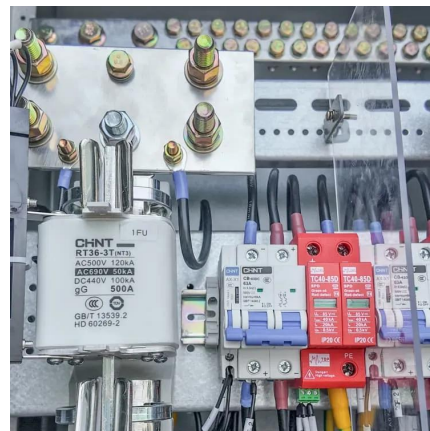


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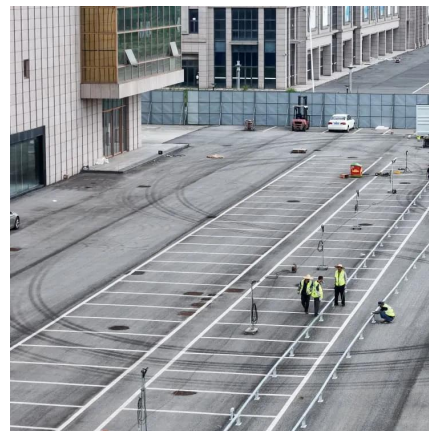


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