



SolarGrid Energy Solutions

Household General Purpose Photovoltaic Inverter



Efficient
Higher Revenue

- Max. Efficiency 97.5%
- Max. PV Input Voltage 600V
- 150% Peak Output Power
- 2 MPP Trackers, 150% DC Input Oversizing
- Max. PV Input Current 16A, Compatible with High Power Modules



Intelligent
Simple O&M

- IP66 Protection Degree: support outdoor installation
- Smart I-V Curve Diagnosis Function: locate PV string faults accurately and automatically detect faults
- DC & AC Type II SPD: prevent lightning damage
- Battery Reverse Connection Protection



Flexible
Abundant Configuration

- Plug & Play, EPS Switching Under 10ms
- Compatible with Lead-acid and Lithium Batteries
- Max. 6 units Inverters Parallel
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

Overview

What is a solar power inverter?

A solar power inverter's primary purpose is to transform the direct current (DC) electricity generated by solar panels into usable alternating current (AC) electricity for your home. Because of this, you can also think of a solar inverter as a solar "converter".

Can a solar inverter power a home?

However, this DC cannot be directly used in homes and businesses, which rely on alternating current (AC) for power. This is where solar inverters come into play. The solar inverter will convert the DC into AC that will be used to power household devices or fed into the grid.

What type of solar inverter do I Need?

The type of solar inverter you get installed at your house will be determined by several factors. To guide your solar design decisions, the four key solar power inverter technologies to know are string inverters, microinverters, power optimizers, and hybrid inverters.

Why do you need a solar inverter?

A solar inverter can help maximize your energy production, monitor your system's output, communicate with the utility grid, and detect faults that might otherwise cause damage or personal harm. Solar inverters can track your panel array's voltage and maximize the ongoing efficiency of your renewable solar energy system.

How does a solar inverter work?

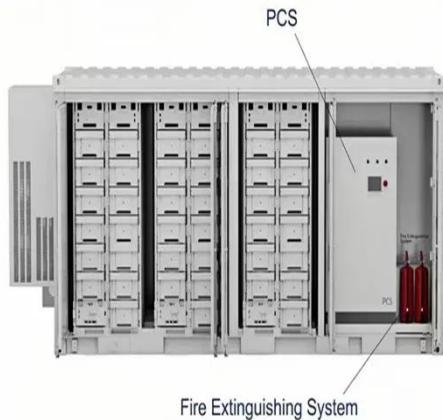
The solar inverter will convert the DC into AC that will be used to power household devices or fed into the grid. Beyond this primary function, modern solar inverters optimise the solar system by using Maximum Power Point Tracking (MPPT) to ensure solar panels operate at peak efficiency under

varying conditions.

What are the different types of solar power inverters?

To guide your solar design decisions, the four key solar power inverter technologies to know are string inverters, microinverters, power optimizers, and hybrid inverters. Also called a central inverter, string inverters are most suitable for simple solar power system designs.

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Solar Power Inverter Systems

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Learn what a solar inverter is, how it works, how different types stack up, and how to choose which kind of inverter for your solar project.



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PV Inverters

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Solar Inverter vs Normal Inverter: Which is Best for Your Home?

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Paper Title (use style: paper title)

Solar residential area in our country is also being developed. In this paper, the design of household photovoltaic inverter system is a residential, the system is suitable for independent ...



The most complete energy storage inverter ...

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Best Solar Inverters for Homeowners in 2025

Mar 27, 2025 · Solar inverters are key to making the electricity generated by solar panels usable in your home. Here are some of the best options on the market

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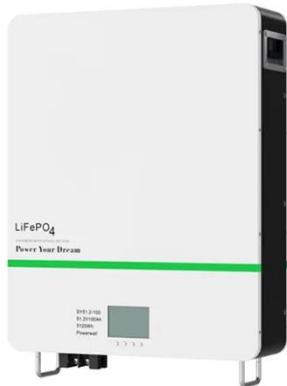
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Solar Inverter system

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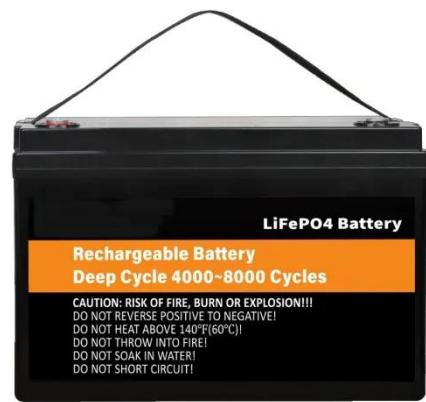
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CN115765404A

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