

# What is a sine wave inverter





## Overview

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What is a sine wave inverter?

Sine wave inverters, often referred to as “true” or “pure” sine wave inverters, are integral components in many modern power systems. They convert direct current (DC) energy, such as that sourced from solar panels or batteries, into alternating current (AC) energy, the type used in most residential and commercial settings.

What is a sine wave?

When current is plotted against time, the curve forms a ‘wave’. There are all sorts of different types of waves for AC power. However the type of wave that we use in our homes and businesses is called a ‘sine wave’. The AC curve in the figure below is a sine wave. The inverter’s job is to take the DC power and convert it to an AC power curve.

What is a pure sine wave power inverter?

The function of a pure sine wave power inverter is to convert direct current into alternating current. It is composed of an inverter bridge, SPWM wave module, drive module and filter circuit. The SPWM inverter circuit is the key to pure sine wave generation.

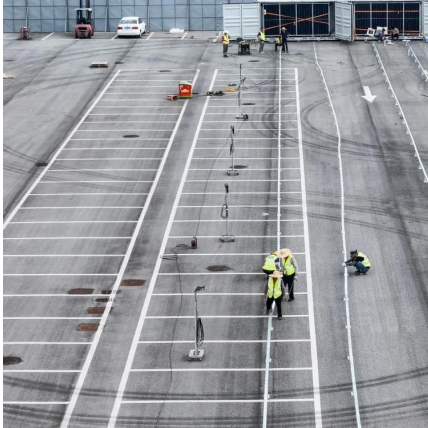
What are the different types of sine wave inverters?

Sine wave inverters are available in two basic types: pure sine wave inverters and modified sine wave inverters. The difference is basically in the electronics. Modified sine wave inverters use simpler and cheaper electronics to produce a wave that is not quite a smooth sine wave.



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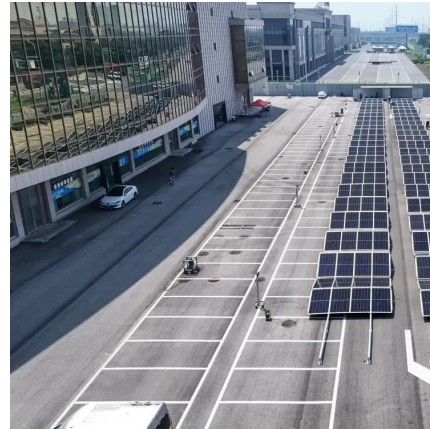


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