



BUHLE POWER

Tracking solar System





Overview

A solar tracker is a device that follows the sun as it moves across the sky. When solar trackers are coupled with solar panels, the panels can follow the path of the sun and produce more renewable energy for you to use. Solar trackers are usually paired with ground-mount solar systems, but recently, rooftop-mounted trackers have come onto the market.

Solar trackers can greatly increase the cost of a photovoltaic solar installation. A standard 4-kilowatt ground-mounted solar system will cost about \$13,000. Tracking equipment can cost anywhere from \$500 per panel to over \$1,000 per panel. If you included a single-axis tracking system on the same array, it would drive the cost up to about \$20,000.

In most cases, solar trackers are not worth the additional investment, even though they do produce more electricity. Because solar panels are cheaper than ever, it would cost less to install more solar panels than it would to include a tracking system. For example, let's say you installed 15 ground-mounted solar panels that had a power rating of 30.

In almost all scenarios, especially for residential solar systems, solar trackers are not worth the additional investment. This is why solar trackers aren't widely used in the residential solar industry. Where solar trackers do become useful is when you have limited space for an installation. If you do not have the space for additional solar panels.

What are the different types of solar tracking systems?

Solar Tracking Systems – DC motors are used in solar tracking systems to provide precise motion control. These motors can adjust the angle of the solar panel to maximise the amount of sunlight it receives. **Wind Turbines** – They are used in wind turbines for various applications, including yaw and pitch control.

What is a solar tracker?



Solar tracker orients payload towards Sun. Payload may be a solar panel or parabolic or dish collectors or Fresnel lenses or heliostat mirrors. For flat panel PV systems, tracker reduces the incidence angle between sun irradiation and PV array.

What is solar tracking & how does it work?

Typically used for ground-mounted solar arrays, solar tracking systems have become a mainstay in the increasingly competitive utility-scale and commercial/industrial segments of the global solar market. Generally speaking, a solar panel system with single-axis solar tracking installed will see a performance gain of 25% to 35%.



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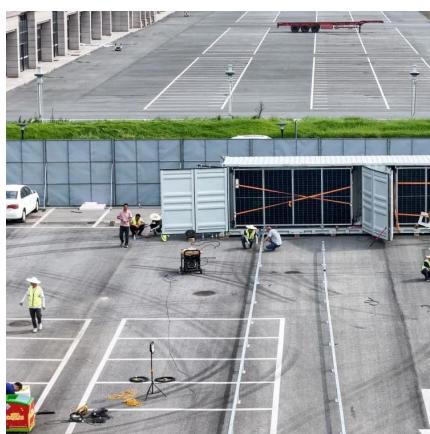


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