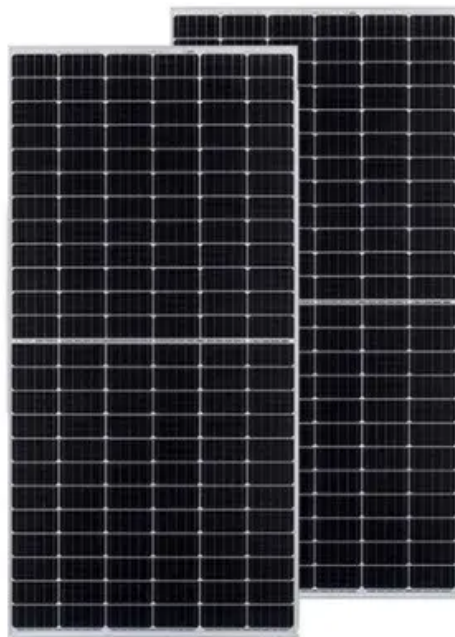


SolarGrid Energy Solutions

Photovoltaic on-site energy with solar panels



Overview

How can on-site solar PV & energy storage improve sustainability?

To achieve sustainability goals while meeting the increasing electricity demands of electrification, organizations are pairing on-site solar PV generation with on-site energy storage. These systems, which are considered as “behind-the-meter” (BTM) systems, allow facilities to maximize the benefits of on-site renewable generation.

Is solar photovoltaic electricity a viable energy source?

The cost of solar photovoltaic electricity has been divided by 10 in the last 12 years, making it one of the most competitive energy sources in the world today. It is now possible to dispose one’s own autonomous energy ecosystems that can continuously meet up to 100% of one’s own electricity needs.

What is photovoltaic solar energy?

Photovoltaic solar energy meets the challenges of decarbonization, optimizing energy costs and increasing energy independence.

What are the benefits of an on-site solar PV system?

For the scenario represented in the graph, an on-site solar PV system allows the facility to reduce the amount of electricity drawn from the grid during the middle of the day. Increasing the amount of solar PV production on-site can provide additional cost and emission reductions and resiliency benefits for facilities.

What is a photovoltaic (PV) cell?

A photovoltaic (PV) cell, commonly called a solar cell, is a nonmechanical device that converts sunlight directly into electricity. Some PV cells can convert artificial light into electricity. Sunlight is composed of photons, or particles of solar energy.

How do solar photovoltaic cells work?

Solar photovoltaic cells are grouped in panels, and panels can be grouped into arrays of different sizes to power water pumps, power individual homes, or provide utility-scale electricity generation. Source: National Renewable Energy Laboratory (copyrighted)

Photovoltaic on-site energy with solar panels



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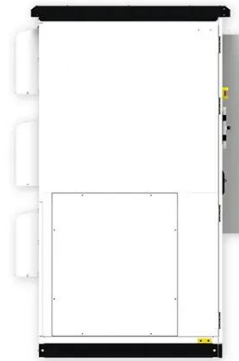
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Solar energy

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Photovoltaics and electricity

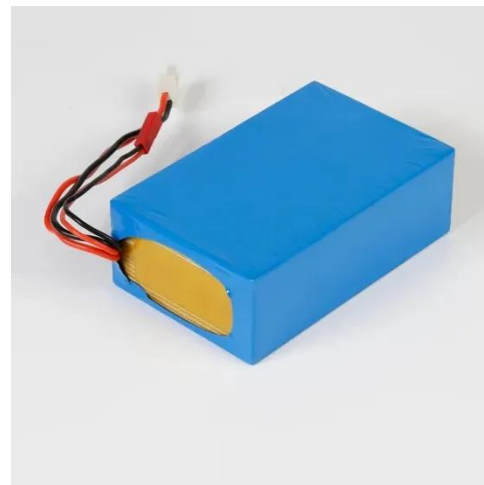
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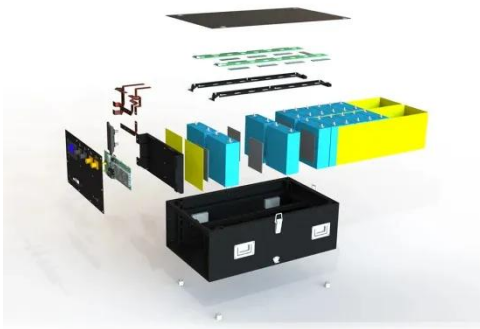
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Dual-Use Photovoltaic Technologies

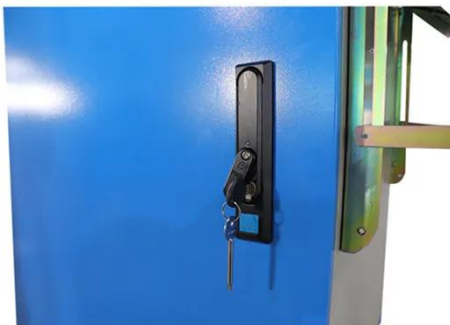
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