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The cells behind the solar panel





Overview

A photovoltaic cell is the most critical part of a solar panel that allows it to convert sunlight into electricity. The two main types of solar cells are monocrystalline and polycrystalline. What are photovoltaic cells?

Photovoltaic cells, also known as solar cells, are the tiny energy engines behind the modern solar revolution. These are specially engineered semiconductor devices that convert sunlight directly into electricity through a process known as the photovoltaic effect.

Why are photovoltaic cells important?

You've likely seen photovoltaic cells in action, whether it's solar panels on rooftops, large solar farms stretching across fields, or even smaller panels on calculators, traffic signals and street lights. These cells are the heart of every solar energy system.

How do solar panels work?

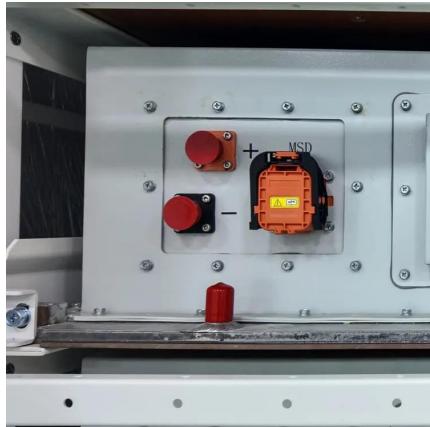
Solar panels are created by wiring together solar cells, which are then installed on a substrate like metal or glass. A typical residential solar panel with 60 cells combined might produce anywhere from 220 to over 400 watts of power. These panels are installed in groups to form a solar power system that generates energy for a home.

How many cells are in a solar panel?

A solar, or photovoltaic (PV), module generally consists of 36 interconnected cells laminated to glass within an aluminum frame. In turn, one or more of these modules may be wired and framed together to form a solar panel.



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