

Inside the solar cell module





Overview

What is a solar cell?

A solar cell (also known as a photovoltaic cell or PV cell) is defined as an electrical device that converts light energy into electrical energy through the photovoltaic effect. A solar cell is basically a p-n junction diode.

What is a solar cell & a photovoltaic cell?

Solar Cell Definition: A solar cell (also known as a photovoltaic cell) is an electrical device that transforms light energy directly into electrical energy using the photovoltaic effect.

How do solar cells work?

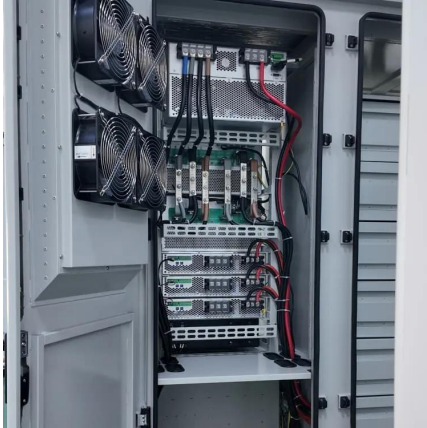
Solar cells can be arranged into large groupings called arrays. These arrays, composed of many thousands of individual cells, can function as central electric power stations, converting sunlight into electrical energy for distribution to industrial, commercial, and residential users.

How are solar cells made?

Solar cells are made from the same kind of semiconductor materials as integrated circuits. Trace impurities are added to a semiconductor to alter its electrical properties – a process known as 'doping'. Differing doping ingredients are used on either side of a semiconductor junction to create an electrical potential.



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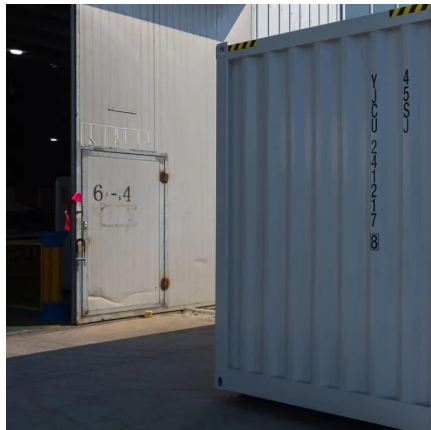
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Diagram of the internal structure of typical silicon PV modules (60 pieces of PV cells) with marked spots of artificial shading of PV cells: (a) Two PV cells shaded (photography); (b) four PV



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