PERC module plan

What is the structure of a PERC solar cell?

The structure of a PERC solar cell from front to rear is as follows : PERC solar cells can be divided into two types, Mono PERC solar cells and Poly PERC solar cells. The mono PERC solar panels are an advanced, upgraded form of conventional monocrystalline solar panels which use homogenous silicon for cell preparation.

What are PERC solar panels?

One option that outstands from the rest is the Passivated Emitter and Rear Contact(PERC) solar technology which allows for the creation of PERC solar panels. The PERC solar panel is a highly efficient and improved type of PV technology that uses Crystalline Silicon (c-Si) and fixes some inconveniences of this traditional technology.

What is PERC technology?

Other advanced panel technologies PERC is only one of the available technologies to improve efficiency and applications for solar panels. There are other advanced technologies like Interdigitated Back Contact (IBC) and Bifacial Solar Cell (BSC) technology. Manufacturers can use either one or even combine PERC with IBC or BSC.

How efficient are PERC solar modules?

PERC modules are able to maintain close of 99%of its STC efficiency at 200W/m2 irradiance level,while a standard solar module's relative efficiency drops to less than 96% at the same condition.

What is PERC & how does it benefit a solar PV system?

PERC leads to increased energy densityand electricity generation for the system. Greater energy density significantly reduces the levelized cost of electricity (LCoE) for a solar PV installation. By effectively leveraging the modules with PERC technology,end users can obtain a much faster RoI.

When did PERC technology start?

PERC technology was first described in the University of New South Wales in 1983but officially registered in a paper in 1989. The PERC solar cell finally allowed PV modules to move over the 20% conversion efficiency that has been the norm for several years in the industry.

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