



PHILADELPHIA SOLAR
DELIVERING CLEAN ENERGY SOLUTIONS

PVTECH
TIER-1 Solar Panels
Manufacturer



MADE IN JORDAN

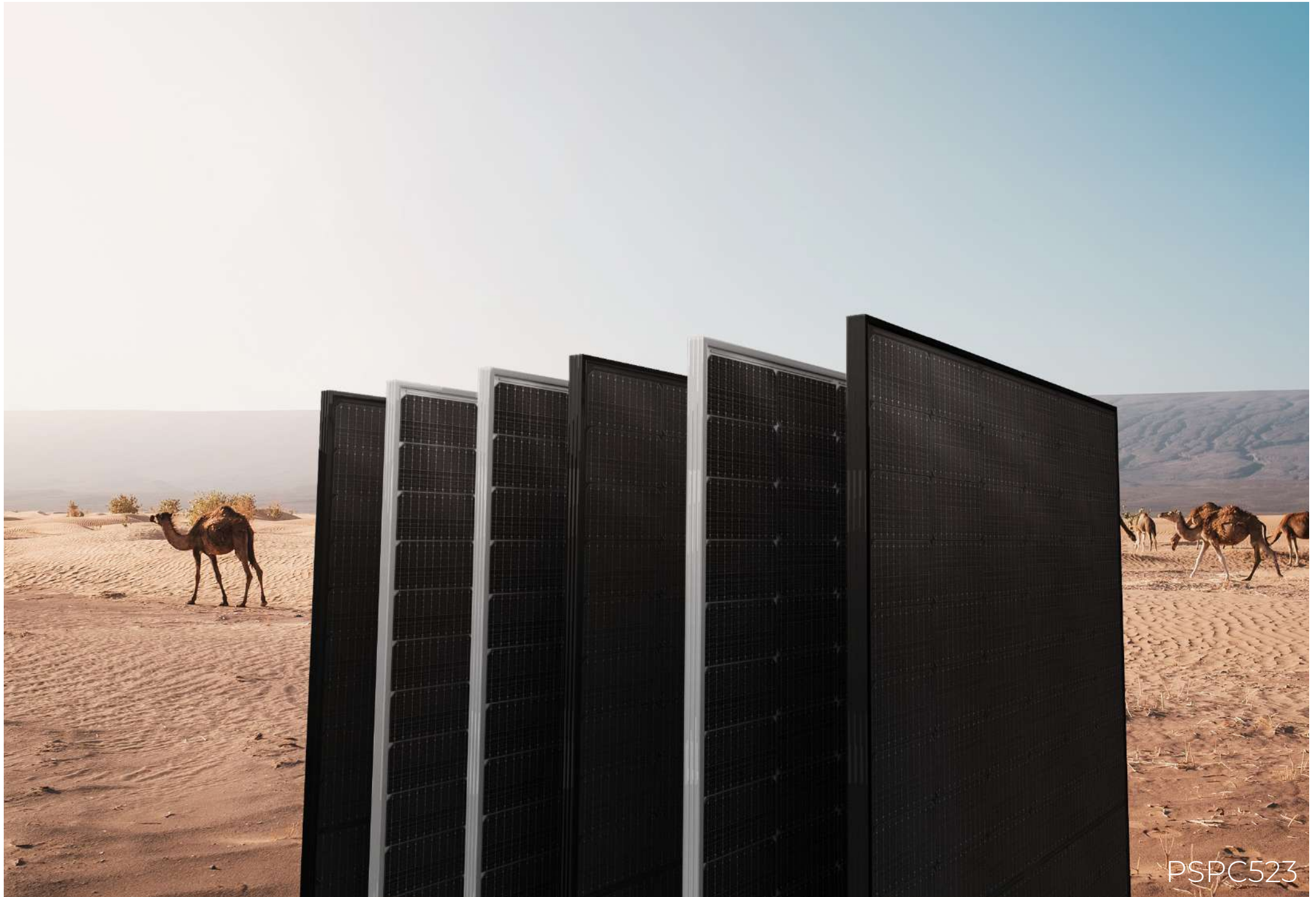


Discover

PHILADELPHIA SOLAR

PV CATALOGUE





PSPC523

Our Solar Panels

Mono-facial

Page 4-5



Iris

BLACK*Iris*

Bifacial

Page 6-7



PHE*Vex*

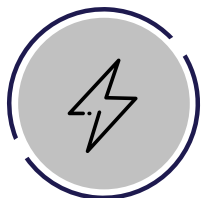
DARK
PHE*Vex*



Automated Production
Line



Certified Quality



High Efficiency and
Extra Yield

As a photovoltaic panel and steel mounting structure manufacturer. Philadelphia Solar is a specialized company that manufactures PV panels and Steel mounting structures. It was established in 2007, with a built-up area of 14,200 m² and a current investment of 160 million USD.

Philadelphia Solar is the first Tier-1 MEA-based company that manufactures, develops, designs, constructs, owns, and operates utility-scale commercial and industrial photovoltaic plants.

VISION

Philadelphia Solar strives to maintain cutting-edge technologies (based on green energy) by marketing the highest international-standard products that are backed by up to 30-year warranty.

MISSION

To provide our customers with state-of-the-art PV modules and steel mounting structure at competitive prices backed up with an outstanding technical support and customer service.

STRATEGY

Customer-oriented by offering differentiated products and services and committed to delivering superior clean energy solutions to maintain a unique position in the market.

18.75 MWp

Social Security Co.



14.7 MWp

Taybah Metal Industries



8.02 MWp

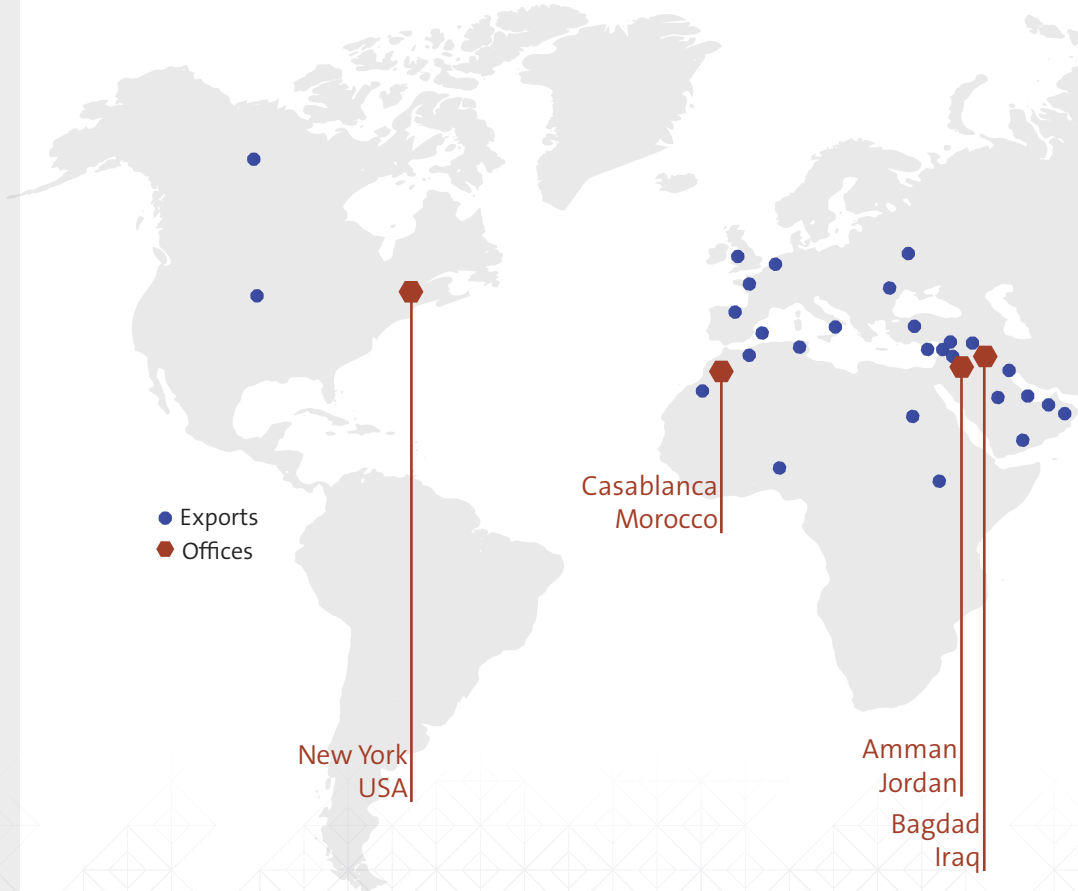
Abdail Medical Center

Export to
52
Countries

Regional
Offices
4

Factory
in Jordan
580MW

Capacity
Expansion
in 2024
1.2GW





Iris

BLACKIris

PS-M144(HC)-xxxW

Cell Type	Half-cell monocrystalline M10 cells		
Number of Cells	144 (72 x 2)		
Maximum Power	540w	545w	550w
Module Efficiency	20.9%	21.1%	21.3%
Dimensions(L x W x D)	2277±1 mm x 1133±1 mm x 35 mm		
Weight	29 kg ± 1 kg		
Output Warranty	(First year: 98%, after 1st year: -0.55% annual degradation, 12 years: 92.0%, 25 years: 84.8%)		
Product Warranty	12 year		

PS-M108(HC)-xxxW

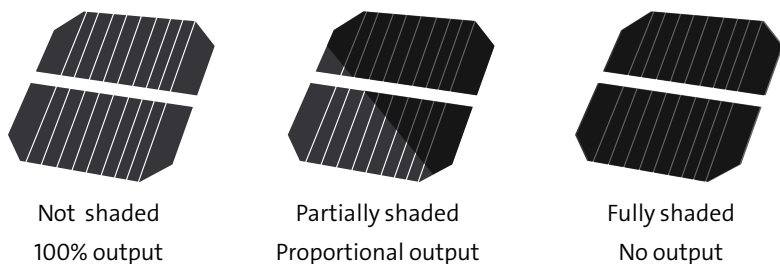
Cell Type	Half-cell monocrystalline M10 cells		
Number of Cells	108 (54 x 2)		
Maximum Power	400w	405w	410w
Module Efficiency	20.5%	20.8%	21.0%
Dimensions(L x W x D)	1721±1 mm x 1133±1 mm x 30 mm		
Weight	20.7 kg ± 1 kg		
Output Warranty	(First year: 98%, after 1st year: -0.55% annual degradation, 25 years: 84.8%)		
Product Warranty	Extendable reaches to 25 years		

For further details, kindly refer to the datasheet at philadelphia-solar.com/downloads

Half-Cut Cell Technology

Half-cut cells in solar panels carry half the current and a quarter of the resistance of a full cell, resulting in a complete half-cell module having the same current but half the resistance of a regular module. This means that a half-cell solar panel can boost output by around 3%.

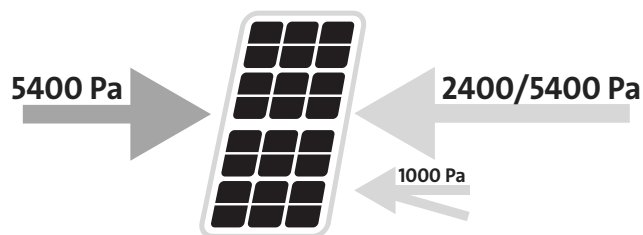
In contrast, a regular panel is typically made up of three rows of cells connected in series with bypass diodes. If one cell is shaded, a third of the panel's output can be lost. However, in a half-cut panel, there are six rows of cells. So, if one of the cells is shaded, only a sixth of the output is lost, leading to significantly improved performance and efficiency.



Durability

Philadelphia Solar (mono-facial/bifacial) panels are highly durable and designed to withstand a variety of weather conditions. Our panels are labrotory tested to have a max static load of 5400 Pa from the front and 2400 Pa from the back and can handle a dynamic load of up to 1000 Pa. Residential modules have an impressive 5400 Pa from the back. These modules are built to last!

To ensure proper installation and optimal performance, it's important to follow the provided installation guidelines.

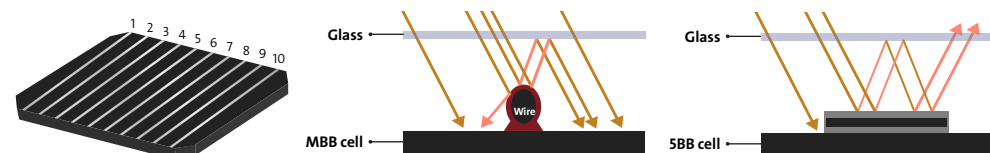


Low Power Temperature Coefficient

Philadelphia Solar's mono-facial panels have one of the best power temperature coefficients in the market at 0.295 %/C°. This means the panels maintain a high level of performance even in hot climates, making them an excellent choice for areas with high temperatures.

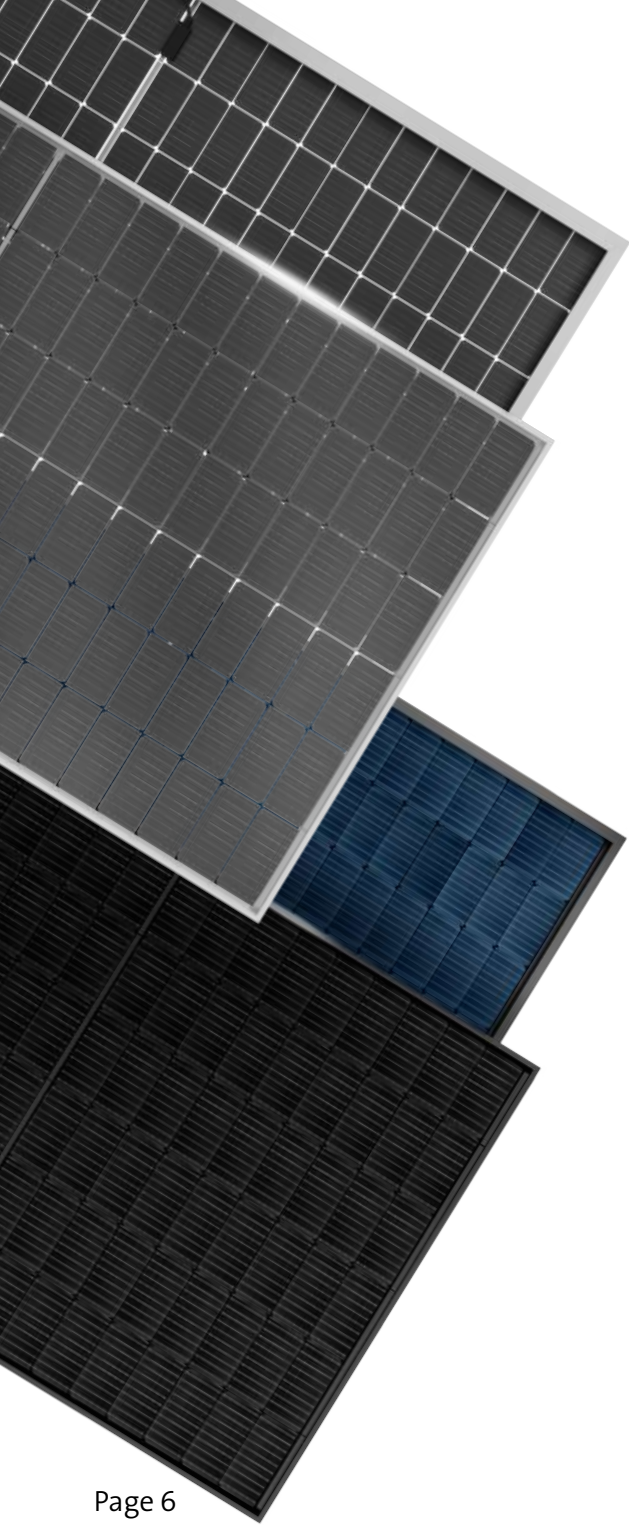


Muilt Bas Bar Cells



Philadelphia Solar panels feature a unique ten busbar design with a short current path that is less affected by micro-cracks and broken fingers. This design enhances module reliability and ensures consistent, high-performance output over time.

In addition, our panels utilize a circular ribbon design that reduces the shading area, reflects more light to the cell surface, and improves module power. This innovative design helps to maximize the efficiency of our panels, providing customers with a reliable and cost-effective source of solar energy.



PHENex

PHENex
Glass to Glass

DARK
PHENex

PS-M144(HCBF)-xxxW

Cell Type	Half-cut monocrystalline M10 cells		
Number of Cells	144 (72 x 2)		
Maximum Power	540w	545w	550w
Module Efficiency	20.9%	21.1%	21.3%
Dimensions(L x W x D)	2277±1 mm x 1133±1 mm x 35 mm		
Weight	29 kg ± 1 kg		
Output Warranty	(First year: 98.0%, after 1st Year: -0.5% annual degradation, 12 years: 92.5%, 25 years: 86.0%)		
Product Warranty	12 year		

PS-M144(HCBF)-GG-xxxW

Cell Type	Half-cut monocrystalline M10 cells		
Number of Cells	144 (72 x 2)		
Maximum Power	540w	545w	550w
Module Efficiency	20.90%	21.10%	21.29%
Dimensions(L x W x D)	2278±1 mm x 1134±1 mm x 30 mm		
Weight	32.5kg ± 3%		
Output Warranty	(First year: 98%, after 1st year: -0.5% annual degradation, 30 years: 83.5%)		
Product Warranty	12 year		

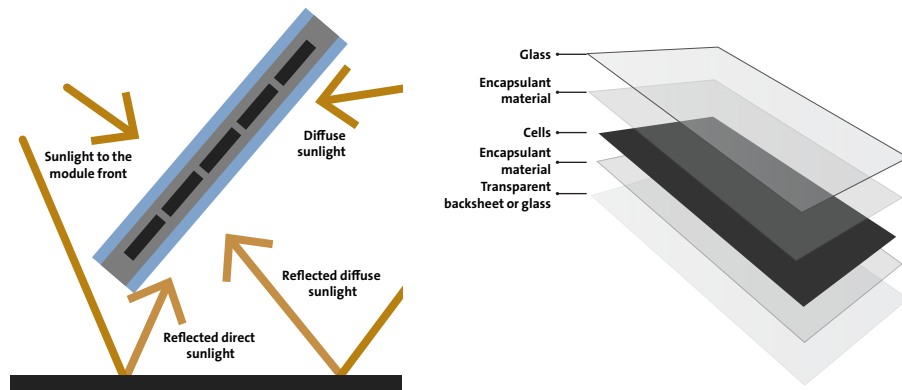
PS-M108(HCBF)-xxxW

Cell Type	Half-cut monocrystalline M10 cells		
Number of Cells	108 (54 x 2)		
Maximum Power	400w	405w	410w
Module Efficiency	20.5%	20.8%	21.0%
Dimensions(L x W x D)	1721±1 mm x 1133±1 mm x 30 mm		
Weight	20.7kg ± 1kg		
Output Warranty	(First year: 98%, after 1st year: -0.5% annual degradation, 12 years: 92.5%, 25 years: 86.0%)		
Product Warranty	Extendable reaches to 25 years		

For further details, kindly refer to the datasheet at philadelphia-solar.com/downloads

Half-Cut Bifacial Technology

Bifacial modules are solar panels that can produce power from the front and the back, making them highly efficient and versatile. The amount of power gained by bifacial modules depends on the reflectivity of the surface they are installed on, and can reach up to 25% on highly reflective surfaces. This innovative technology allows for greater energy production and a more sustainable and cost-effective source of solar power.



Tested High Quality

At Philadelphia Solar, we are committed to providing our customers with the highest quality solar panels available. To ensure this, our solar panels undergo rigorous electroluminescence (EL) inspections using state-of-the-art machines. This process provides added value and assurance to our already top-quality panels.

Our quality team works tirelessly to maintain the highest standards throughout the production process, and our panels are insured by a range of certifications. These certifications ensure that our customers can have confidence in the quality, reliability, and efficiency of our solar panels, making them an excellent investment for any solar energy project.



PERC Technology

Passivated emitter rear cell technology (PERC) is a cutting-edge solar cell manufacturing technique that significantly improves the efficiency of silicon wafers. By adding an anti-reflective coating to the rear side of the cell, more sunlight can be captured and converted into power, making PERC cells much more efficient than traditional cells.

The PERC technology also enhances the overall performance of the cell by boosting its light-capturing ability. The addition of the anti-reflective coating increases cell efficiency by reflecting back into the cell any light that has passed through to the rear without producing electrons. This process gives photons a second chance to generate electricity, resulting in a much higher conversion efficiency than traditional solar cells.

In addition to their higher efficiency, PERC cells offer several advantages over traditional solar cells, including reduced rear recombination, less heat production, and longer lifespan. By reducing the amount of current loss due to electrical recombination in the rear side of the cell, PERC technology ensures higher conversion rates and more reliable performance over time. Furthermore, the reduced heat production of PERC cells can further extend their lifespan.

Warranty

Philadelphia Solar panels' come with a 12-year product warranty in both English and Arabic, along with a power production warranty that covers 25-30 years. Residential modules have an extendable product warranty that lasts for 25 years.



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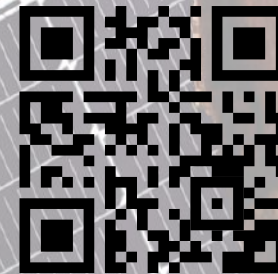
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Website



EMPOWERING TOMORROW

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