

PRODUCT BROCHURE

Premium High Performance
Solar Modules



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ABOUT SUNEVO

A WORLD-CLASS SOLAR MODULE MANUFACTURER

As a world-class solar products manufacturer, SunEvo specializes in research, development, production, and sales of solar PV products. Since its foundation in 2011, SunEvo Solar has accomplished significant achievements which outpaced most of our main competitors in terms of production capacity and in the number of innovative designs. SunEvo upholds its belief that innovation is the key driver behind advancement by pursuing new technologies and higher efficiencies. We are proud to be a leader in the PV industry in terms of technological innovations.

SunEvo serves worldwide customers with high-quality products and professional services. So far more than 8GW SunEvo Solar' s products have been widely applied in over 80 countries.

 **TIER1**
Solar Module Maker

 **8GW+**
Modules Installed

 **100+**
Technology Patents

 **80+**
Destination Countries

 **5GW**
Production Capacity

 **50+**
Global Partners





ABOUT SUNEVO

GLOBAL SALES NETWORK

Adhering to the idea of integrating global resources, we fully integrate capital, technology, brands, networks, and manufacturing resources, forging a talented team, R&D platform, after-sales service and market networks for internationalized operation, driving and managing global industrial layout and business development. Based on the core capabilities in project engineering, trade services, system integration and globalization, we implement a diversified strategy and achieve a comprehensive platform for the clean energy industry.

Our Partners

 HUAWEI	SUNGROW	 Growatt
 solis	 PYLONTECH	 GOODWE YOUR SOLAR ENGINE
 SOLAX POWER	 invt	 hoymiles

EXPERIENCE AND A COMMITMENT TO EXCELLENCE

Over the years, SunEvo has established itself as a leader in solar industry, a pioneer in technical innovation, and a perfectionist in quality assurance. SunEvo has been continuously challenging itself to develop new technologies, higher efficiency products, and provide better services. SunEvo has been certified to international performance and safety standards by independent third party laboratories.

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- 2011 SunEvo first solar PV module factory founded in China; Received ISO9001/ISO14001/OHSAS18001 certificates.

 - 2012 SunEvo upgraded the construction and expanded its solar module production line from 120MW to 200MW.

 - 2013 "SunEvo" brand was rewarded "ANHUI Provincial Excellent Brand".

 - 2016 Total solar module capacity of SunEvo exceeded 600MW in China.

 - 2017 Awarded Deloitte "Top 50 High-tech and High Growth Enterprise of China 2009" ; Get UL and CQC certificate.

 - 2018 SunEvo new automated and intelligent solar module manufacturing plant was officially put into operation in Wuxi city, Jiangsu Province. SunEvo Solar self-developed dual glass solar module was promoted into Australia and America markets.

 - 2019 SunEvo global cumulative module shipment reached 5GW. The company's independently research and developed nano-texturing high-efficiency cell technology obtained exclusive patent. SunEvo launched half cut cell solar modules.

 - 2020 SunEvo lanch Evo 4 series solar module with 166mm half cell. SunEvo receiving UL 61730 certificate.

 - 2021 SunEvo lanch Evo 5 series solar module with 182mm half cell. SunEvo new HJT solar cell efficiency reach to 24.4%.

 - 2022 SunEvo lanch Evo 6 series solar module with 210mm half cell, lead the new 600W+ era.

 - 2024 SunEvo launched the Evo 6N series solar module with 210mm half cell, leading the new 700W+ era. Also launched the rectangular solar cells 199*182mm and 210*182mm.

Mission:

Optimize the energy portfolio and take responsibility for enabling a sustainable future.

Vision:

Provide an one-stop solution for clean energy and become an industry leader.





WHY SUNEVO

SMARTER MANUFACTURING SMARTER CHOICE

SunEvo positions itself as a leader in the solar industry not only in leading-edge product performance, but also in manufacturing equipment, quality control, and customer service. SunEvo strives to meet all of clients' expectations by utilizing fully automated manufacturing facilities, advanced quality control system, and self-developed fully transparent quality management system.

10% Higher equipment effectiveness

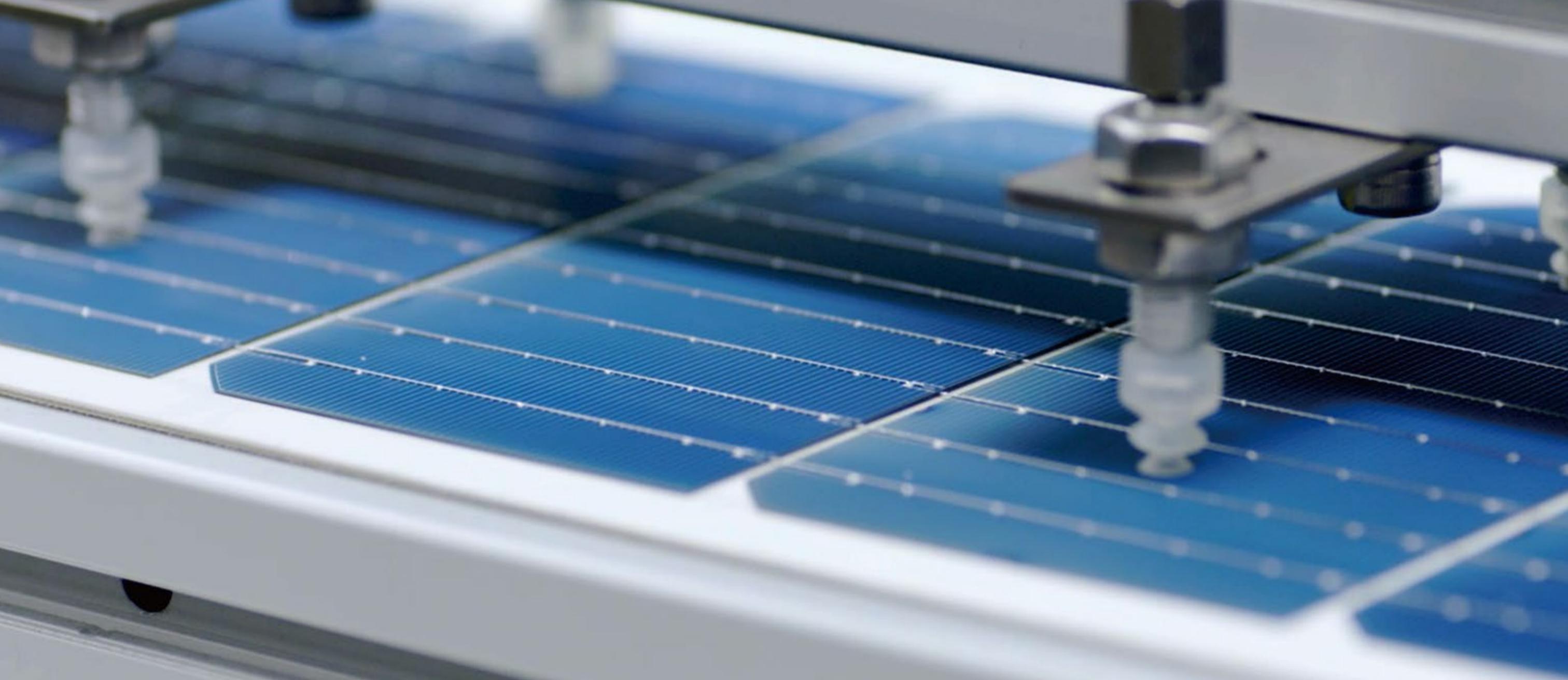
99% Good product yield rate

24⁷ Real-time online monitoring

35% Higher production efficiency

40⁺ Patents on production process optimization

10% Lower production cost



WHY SUNEVO

STRICT QUALITY CONTROL SYSTEM

Stringent quality control is the cornerstone of SunEvo's manufacturing. Our customers have come to expect uncompromising quality in our products. To meet this expectation of high quality, we continue to invest in state-of-the-art equipment and professional training for our employees. We are proud of our product quality and their reliable performance even in the most extreme conditions.

MATERIAL CONTROL

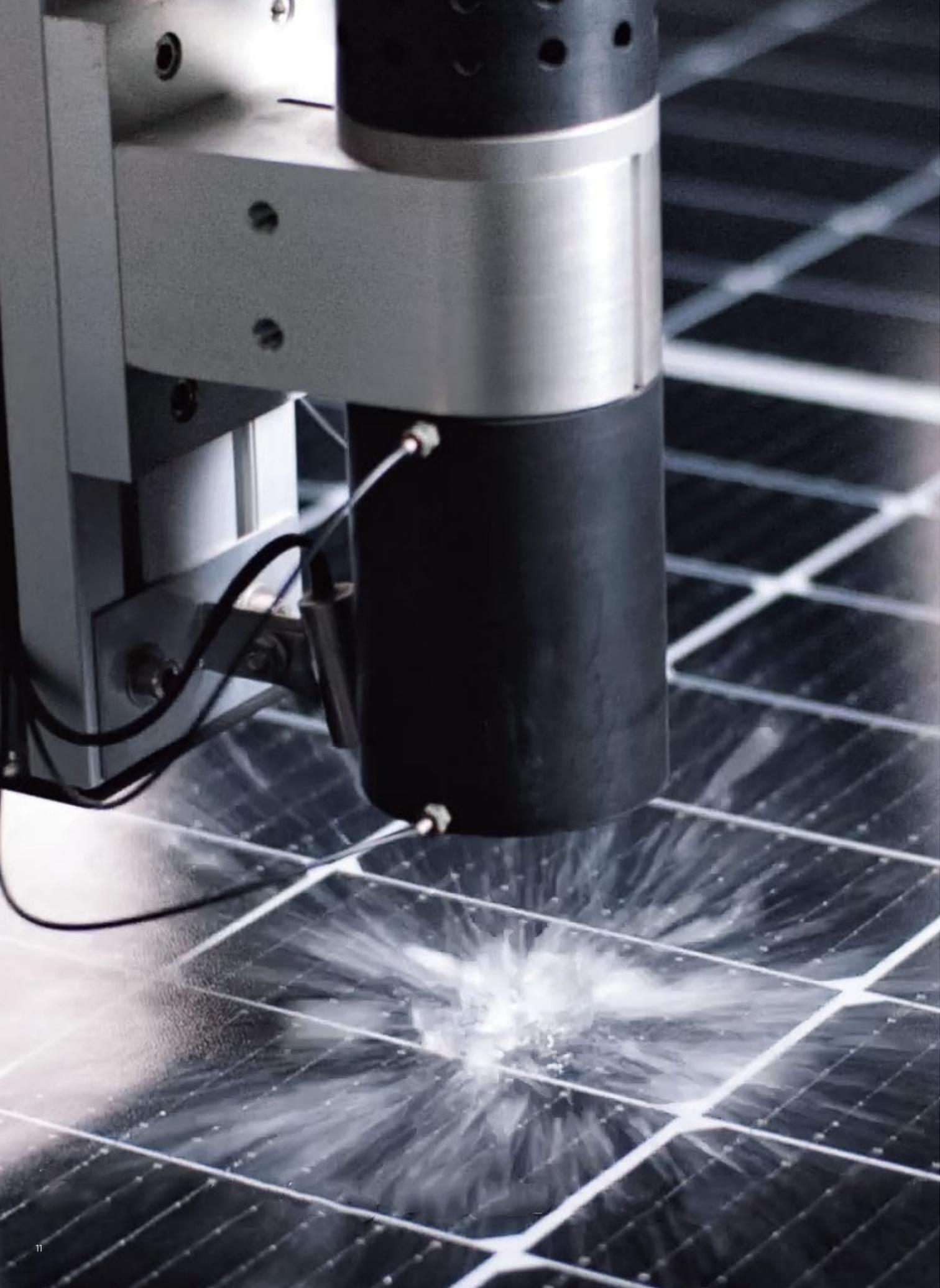
- Stringent Supplier Management
- Spot Check Every Feedstock Batch
- Supplier Quality Engineering
- Automatic Material Filtration and Sorting
- Proper Storage at Fixed Temperature and Humidity
- Incoming-material Quality Assurance

AFTER PRODUCTION

- Open Box Audit (OBA) Test

PRODUCTION CONTROL

- 300+ Quality Check Points
- 3 * EL Tests
- In-process Quality Control
- A+A+A+ Rated H.A.L.M. Sun Simulator



WHY SUNEVO

PROVEN HIGHER MODULE EFFICIENCY AND OUTPUT

**THREE TIMES
MORE THAN INDUSTRY
STANDARDS
IEC61215 AND IEC61730**

SunEvo passed the strictest accelerated stress testing and characterization under DNV GL PVEL, LLC's (DNV GL) Product Qualification Program (PQP). The PQP is a comprehensive evaluation of environmental sensitivities and degradation mechanisms of PV module designs.

In addition, our module products have received the China Quality Certification Center's ("CQC") Top Runner Program level-one energy efficiency certification

Thresher test (300% the IEC standards) includes a series of tests for thermal cycling, damp heat, PID, UV, humidity freeze and hot spot. It is designed to test whether or not modules can maintain their power output during adverse conditions throughout their lifetime.

P	Condition	IEC Criteria	Thresher Criteria
Thermal Cycles	-40-80°C	200 cycles	600 cycles
Damp Heat	85°C 85%RH	1000h	3000h
PID	—	—	96h
UV Resistance	—	15kW/m ²	45kW/m ²
Humidity Freeze	-40°C- 80°C 85%RH	10 cycles	30 cycles
Hot Sport	60kwh/m ²	5h	20h

OUR PRODUCTS

EVO 6R SERIES

Compared to traditional square wafer, the design of 210mm x 182mm rectangular wafer allows for achieving larger and optimal wafer. This not only lowers production cost but also enhances system value, becoming a crucial pathway for improving efficiency. Evo 6R module equipped with advanced HJT 3.0 cell technology, boasts an efficiency up to 23.5%, power output up to 635W, bifaciality of 85%, Tem. Co-efficient of $-0.26\%/^{\circ}\text{C}$, first-year degradation $\leq 1\%$, 30-years linear degradation $\leq 12\%$.

635^W

Max Output Power

210R^{mm}

Solar PV Cell Type

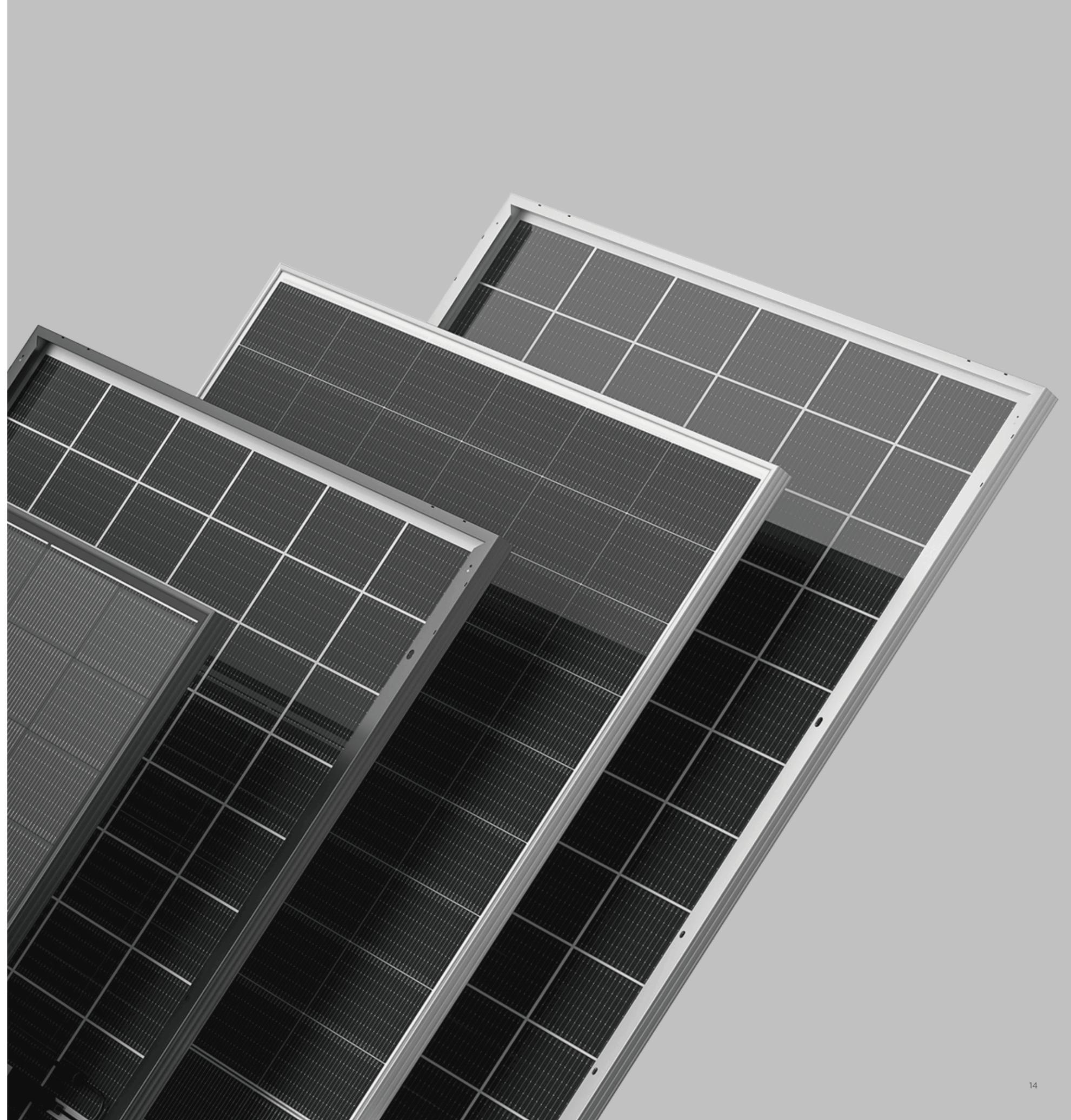
30^{Year}

Linear Power Warranty

23.51[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE6R-48HBD(Bifacial)	435-460W	1762×1134×30mm / 23.0kg
SE6R-54HBD(Bifacial)	495-525W	1960×1134×30mm / 27.6kg
SE6R-66HBD(Bifacial)	600-635W	2382×1134×30mm / 33.6kg



OUR PRODUCTS

EVO 6N SERIES

Heterojunction technology (HJT) is a N-type bifacial solar cell technology, by leveraging N-type monocrystalline silicon as a substratum and depositing silicon-based thin films with different characteristics and transparent conductive films on the front and rear surfaces respectively. Combining with the benefits of crystalline silicon and amorphous silicon thin-film technologies, HJT technology has excellent photoabsorption and passivation effects, as well as outstanding efficiency and performance.

735^W

Max Output Power

210^{mm}

Solar PV Cell Type

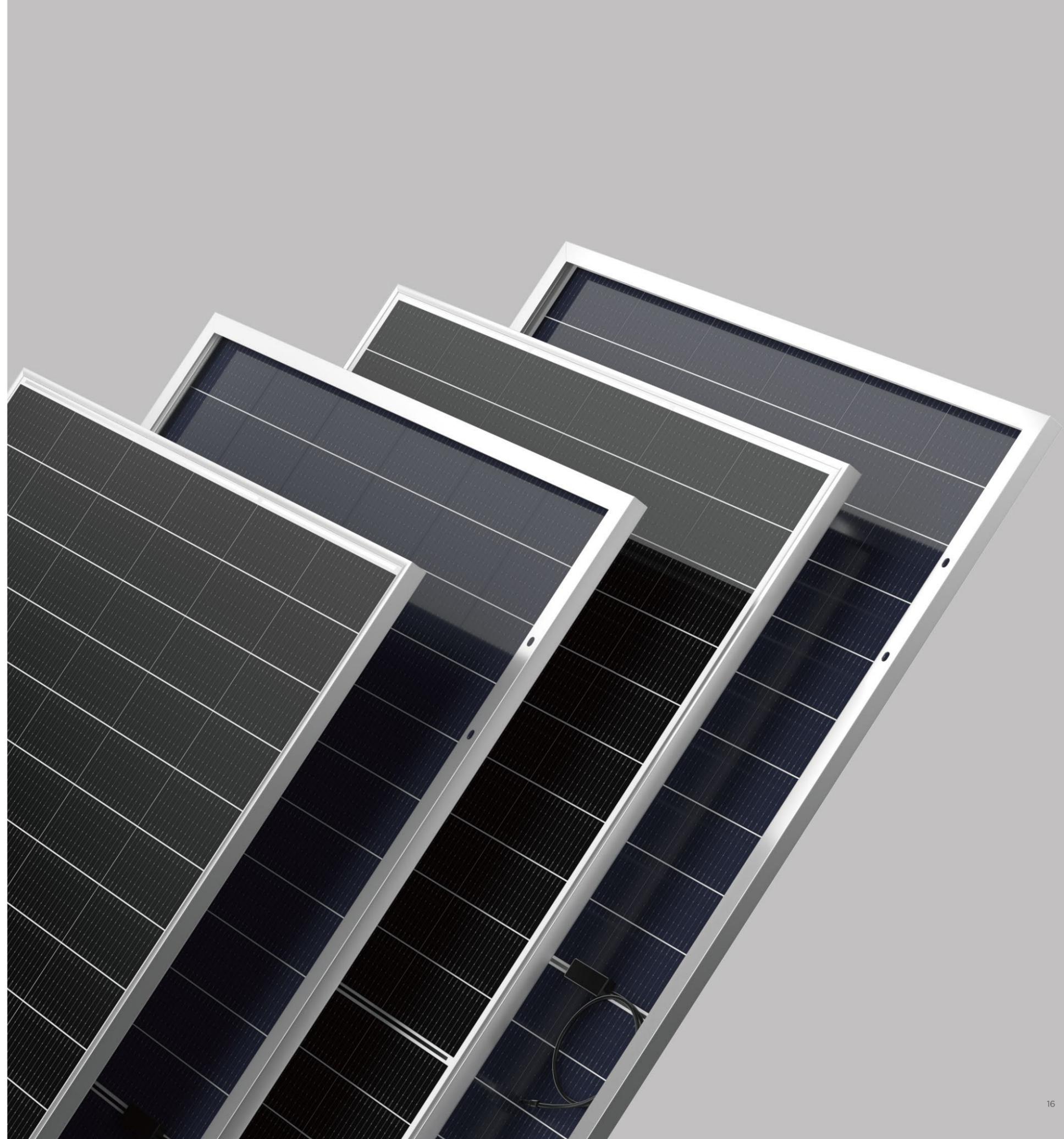
30^{Year}

Linear Power Warranty

23.7[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE6-60HBD(Bifacial)	625-645W	2172*1303*35mm / 35.3kg
SE6-66HBD(Bifacial)	700-735W	2384*1303*33mm / 38.7kg



OUR PRODUCTS

EVO 6 SERIES

In order to create the ultimate cost-effective product, SunEvo launched a new generation of ultra-high efficiency modules, the Evo 6 series. The new series integrates 210mm silicon wafers, with PERC, bifacial, multi-busbar cell technology and high-density encapsulation. The maximum power output on the front side of the two formats, 60 and 66, have both exceeded 600W. Meanwhile, based on different installation environments, the rear side power generation gain is between 10-30%.

675^W

Max Output Power

210^{mm}

Solar PV Cell Type

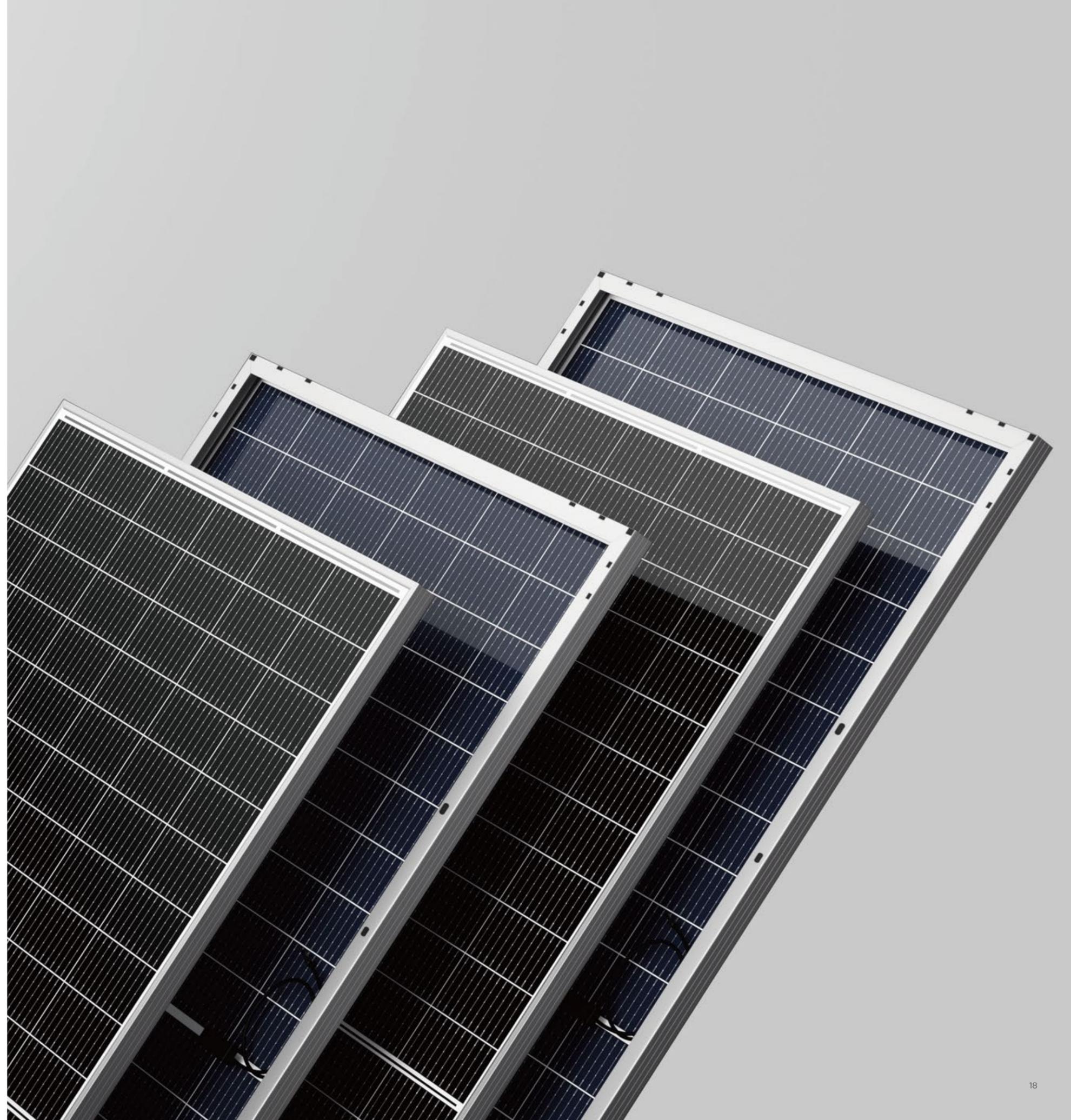
30^{Year}

Linear Power Warranty

21.7[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE6-60H	595-615W	2172×1303×35mm / 30.9kg
SE6-66H	655-675W	2384×1303×35mm / 34.8kg
SE6-60HBD(Bifacial)	590-610W	2172×1303×35mm / 34.8kg
SE6-66HBD(Bifacial)	650-670W	2384×1303×35mm / 38.2kg



OUR PRODUCTS

EVO 5N TOPCon

Modules combine leading HJT & TOPCon technology, SMBB and half-cell. The SunEvo N-type Half-cell Module can reach power output up to 630W. N-type solar cell has zero LID/LeTID risk, and make modules to be higher reliable, higher bifaciality, higher efficiency, lower temperature coefficient and longer lifetime.

630^W

Max Output Power

182^{mm}

Solar PV Cell Type

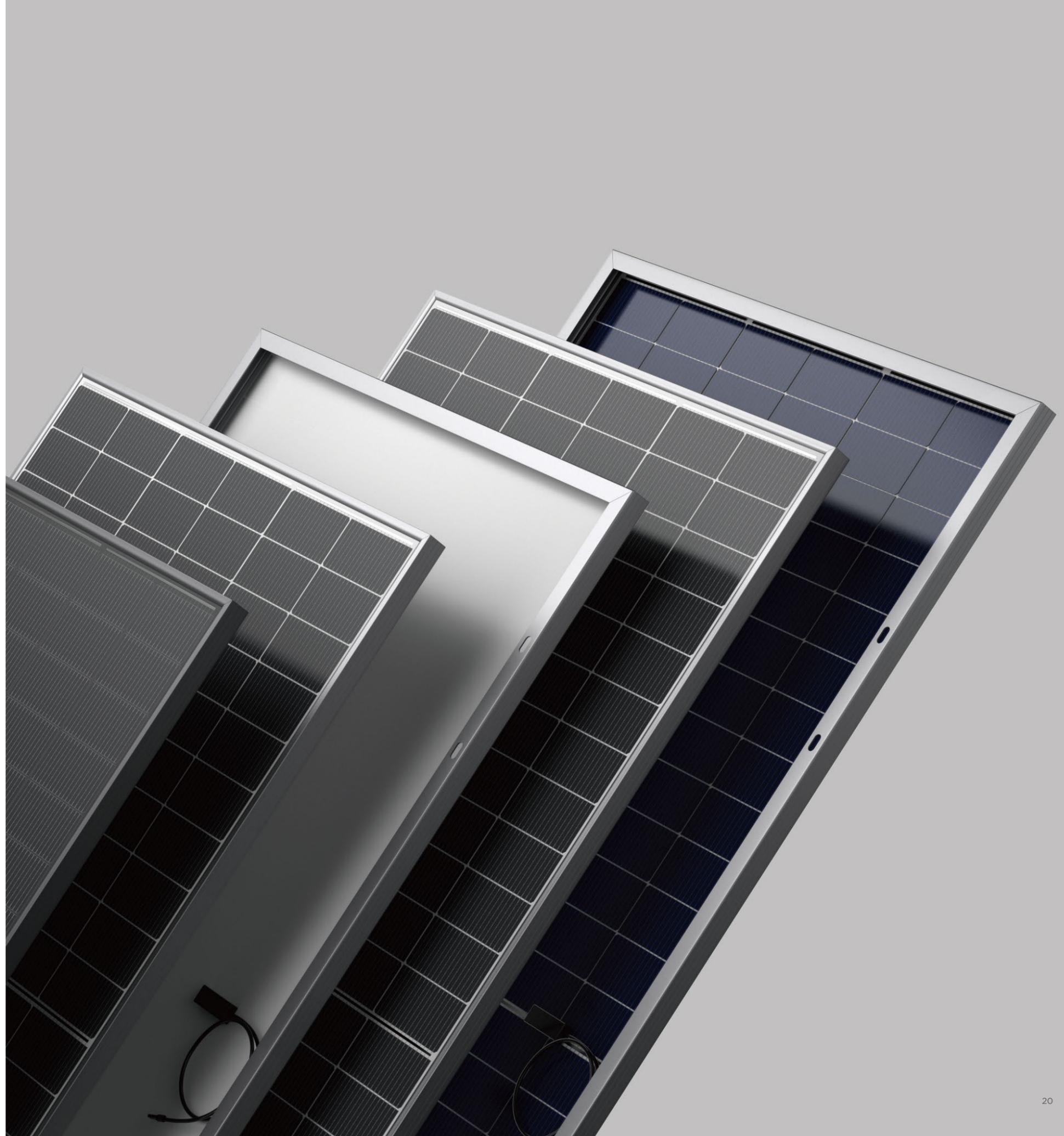
30^{Year}

Linear Power Warranty

23.3[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE5-78H	620-640W	2465×1134×35mm / 30.0kg
SE5-72H	570-590W	2279×1134×35mm / 27.5kg
SE5-66H	520-540W	2094×1134×35mm / 25.5kg
SE5-60H	470-490W	1910×1134×30mm / 23.0kg
SE5-54H	420-440W	1722×1134×30mm / 21.0kg
SE5-78HBD(Bifacial)	615-635W	2465×1134×30mm / 34.5kg
SE5-72HBD(Bifacial)	565-585W	2279×1134×30mm / 31.5kg
SE5-66HBD(Bifacial)	515-535W	2094×1134×30mm / 28.5kg
SE5-60HBD(Bifacial)	465-485W	1910×1134×30mm / 26.0kg
SE5-54HBD(Bifacial)	415-435W	1722×1134×30mm / 23.5kg



OUR PRODUCTS

EVO 5N HJT

Modules combine leading HJT & TOPCon technology, SMBB and half-cell. The SunEvo N-type Half-cell Module can reach power output up to 630W. N-type solar cell has zero LID/LeTID risk, and make modules to be higher reliable, higher bifaciality, higher efficiency, lower temperature coefficient and longer lifetime.

600^W

Max Output Power

182^{mm}

Solar PV Cell Type

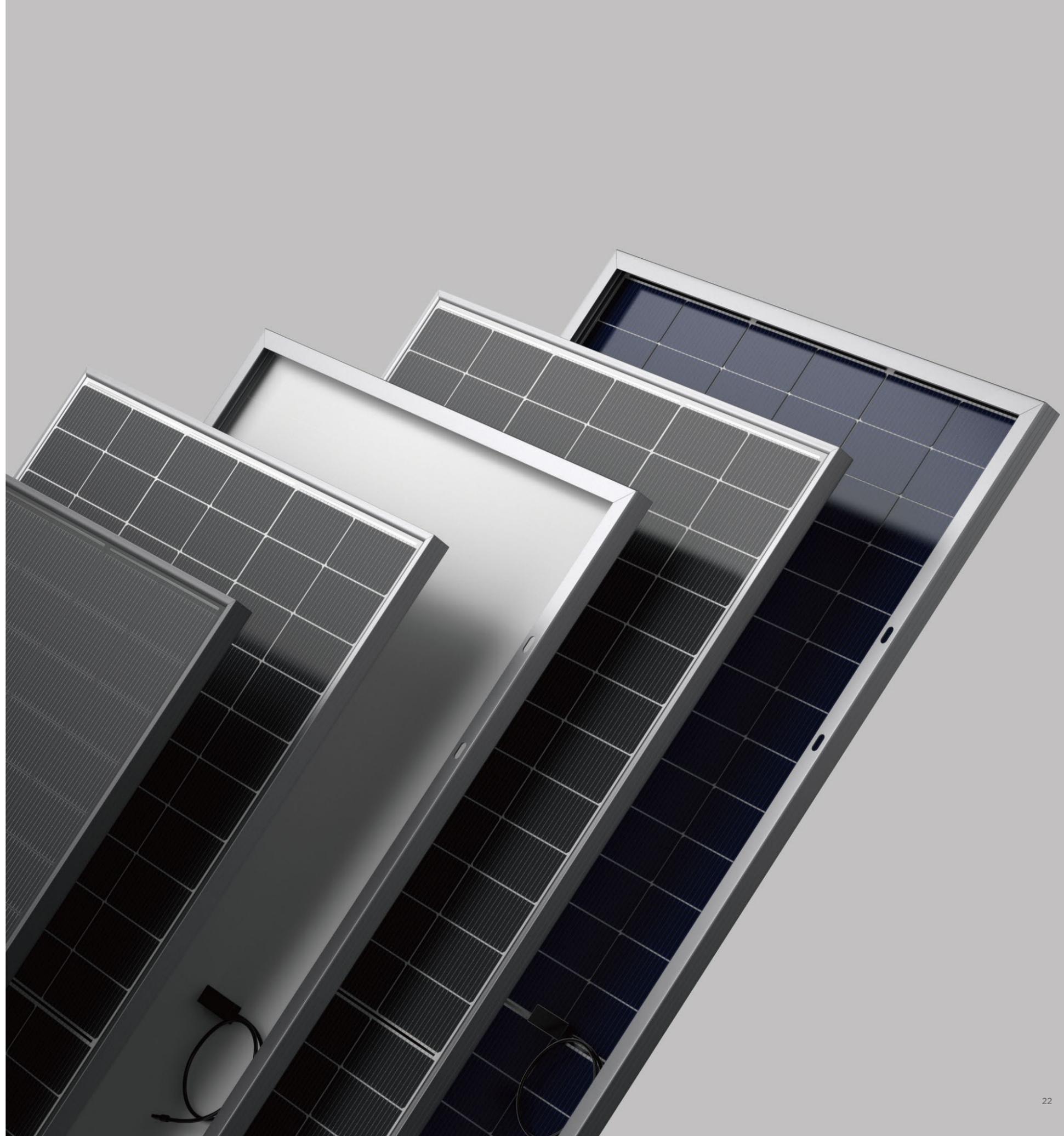
30^{Year}

Linear Power Warranty

23.23[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE5-54H	430-450W	1722×1134×30mm / 21.0kg
SE5-54HBD(Bifacial)	430-450W	1722×1134×30mm / 23.5kg
SE5-60HBD(Bifacial)	480-500W	1910×1134×30mm / 26.0kg
SE5-72HBD(Bifacial)	580-600W	2276×1134×30mm / 31.5kg



OUR PRODUCTS

EVO 5 SERIES

SunEvo focuses on value creation and in the winter of 2020 launches a new generation of high efficiency PV modules, the Evo 5 series. The new series integrates 182mm large-size silicon wafers with PERC, multi-busbar, half-cell, bifacial technologies and high-density encapsulation. Technology integration enables the Evo 5 series to increase the efficiency of the module up to 21.9%, and a maximum power output on the front side of 560W.

560^W

Max Output Power

182^{mm}

Solar PV Cell Type

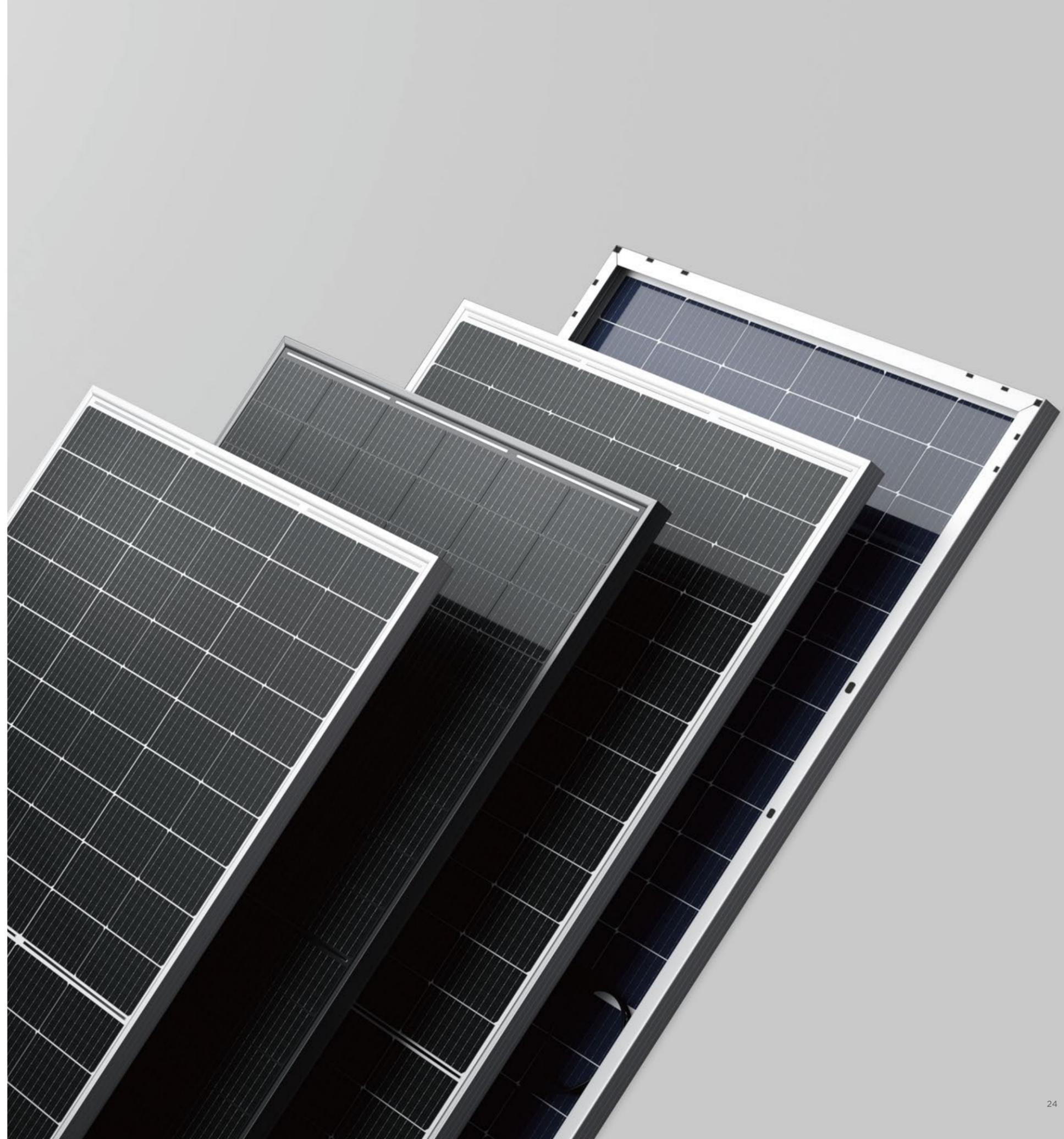
30^{Year}

Linear Power Warranty

21.9[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE5-54H	400-420W	1722×1134×35mm / 20.8kg
SE5-72H	540-560W	2278×1134×35mm / 26.9kg
SE5-54H(Black)	400-415W	1722×1134×35mm / 20.8kg
SE5-72HBD(Bifacial)	535-555W	2278×1134×35mm / 32.6kg



OUR PRODUCTS

EVO4 Series

SunEvo redefined the high-efficiency module series by integrating 166mm silicon wafers with bifacial, multi-busbar, and half-cut cell technologies. The maximum module efficiency of the Evo 4 series is 22%, and the maximum power output of the front side is 460W.

475^W

Max Output Power

166^{mm}

Solar PV Cell Type

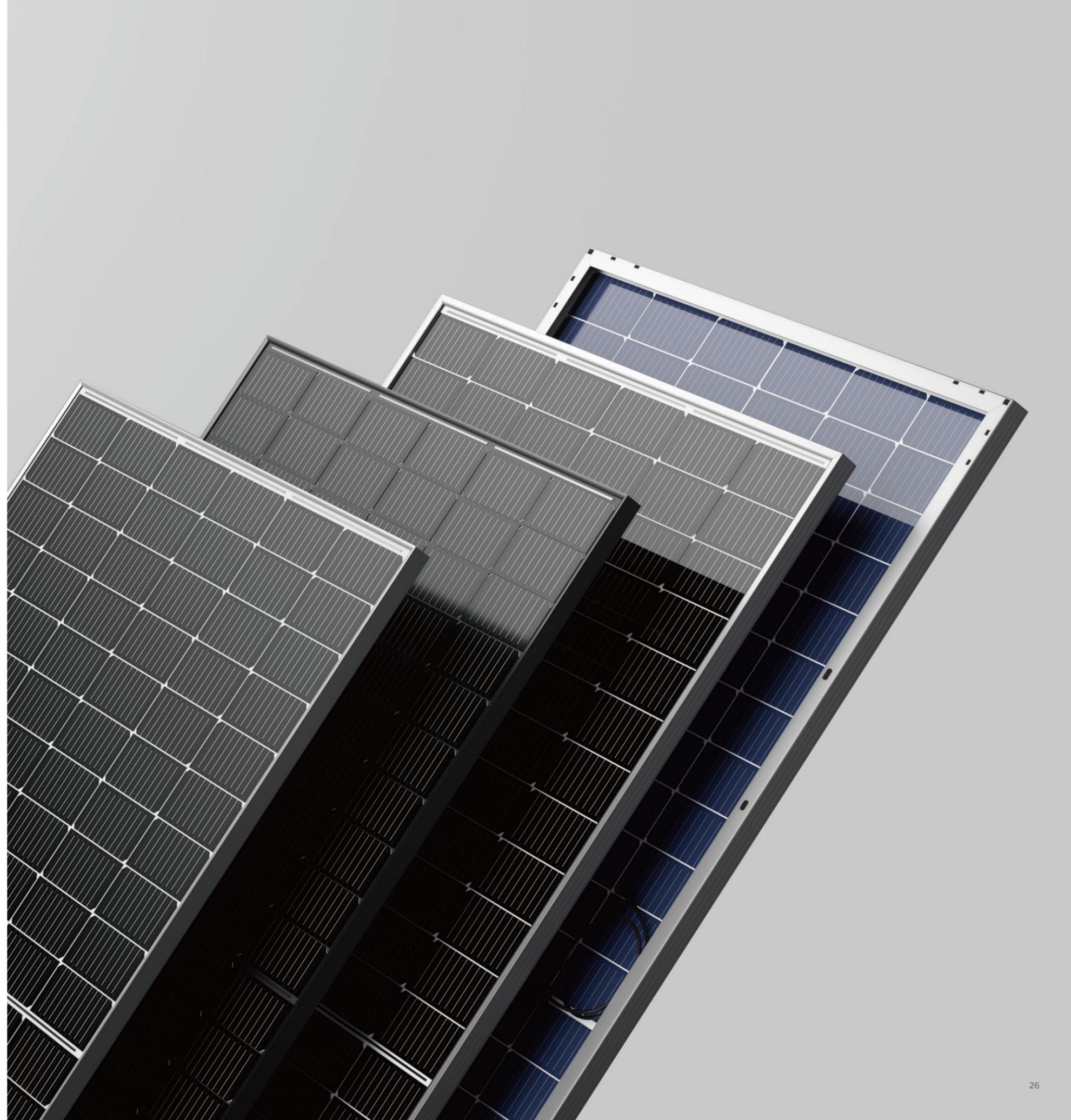
30^{Year}

Linear Power Warranty

22.0[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE4-60H	370-400W	1755×1038×35mm / 20.0kg
SE4-72H	445-475W	2094×1038×35mm / 23.3kg
SE4-60H (Black)	360-390W	1755×1038×35mm / 20.0kg
SE4-72HBD(Bifacial)	445-475W	2094×1038×30mm / 26.7kg



OUR PRODUCTS

EVO B SERIES

Evo B series has been greatly upgraded in appearance, performance, reliability with Back Contact(BC) high-efficiency cell. In terms of appearance, Evo B series simplifies the complexity and redefines the aesthetic concept of photovoltaic modules. In terms of performance, Evo B series greatly improves the photoelectric conversion capacity of the module by comprehensive optimization. In terms of reliability, BC cell (including IBC HBC TBC ABC HPBC) adopts full back welding technology to effectively improve the resistance to micro cracking of modules.

600 ^W

Max Output Power

182 ^{mm}

Solar PV Cell Type

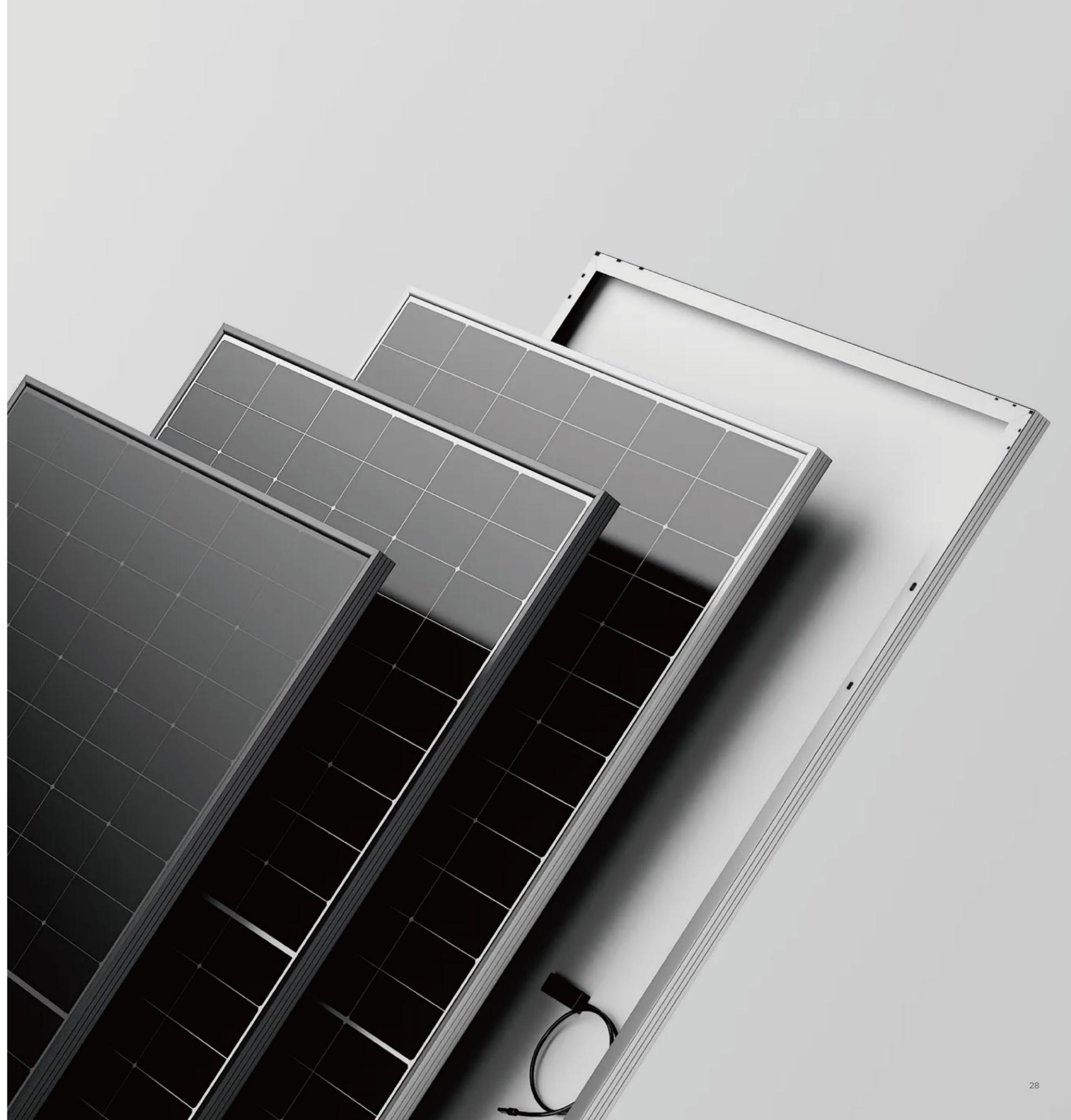
25 ^{Year}

Linear Power Warranty

23.2 %

Module Efficiency

Module	Maximum Power	Size / Weight
SE5-54HBC	445-455W	1722×1134×30mm / 20.8kg
SE5-72HBC	565-600W	2278×1134×30mm / 27.2kg
SE5R-72HBC	605-630W	2382×1134×30mm / 28.5kg



OUR PRODUCTS

EVO X SERIES

The shingled modules utilize solderless interconnection technology. The cells are stacked in a tiled manner and bonded with flexible adhesive, eliminating the spacing between solar cells, improving module efficiency, and reducing BOS and LCOE. Evo X Series shingled module family covers power output from 400W to 445W, and are designed for residential, commercial and industrial (C&I) distributed, and large-scale ground-mount solar projects. The product has exceptional power output, efficiency, and reliability, which significantly improves the return on investment (ROI).

445^W

Max Output Power

210^{mm}

Solar PV Cell Type

30^{Year}

Linear Power Warranty

21.7[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE6-44SC	400-430W	1812×1096×30mm / 20.8kg
SE6-46SC	420-445W	1899×1096×30mm / 21.8kg



OUR PRODUCTS

EVO C SERIES

Evo C is latest series of colored photovoltaic solar modules, which allow the photovoltaic system to blend with the roof's brick and terracotta tiles, they are also suitable for particular requirements for historic city centers or for special architectural needs of modern constructions, Evo C series modules with coloured glass and coloured frame transform the module into a pleasant architectural element for Building Integrated Photovoltaics, so it's also a kind of BIPV. Now Evo C series colorful solar panel is available in 3 coloured versions: Red, Orange, Green with up to 370 Wp power and more colour of the frame can be customized.

390^W

Max Output Power

182^{mm}

Solar PV Cell Type

25^{Year}

Material Warranty

30^{Year}

Linear Power Warranty

Module	Maximum Power	Size / Weight
SE5-54H	370-390W	1722×1134×30mm / 21kg



OUR PRODUCTS

EVO S SERIES

High in power, compact in size, our Evo S series customized solar panel is the perfect option for any off-grid application. Ideal for RVs, motorhomes, cabins, marine areas, home backup power, and more. The panels feature lightweight aluminum frames and shatter-resistant glass, making them perfect for outdoor applications. It comes with pre-drilled mounting holes, solar connector leads, and a junction box. Allowing you to install, connect it to a controller, or expand with panels without breaking.

400^W

Max Output Power

210^{mm}

Solar PV Cell Type

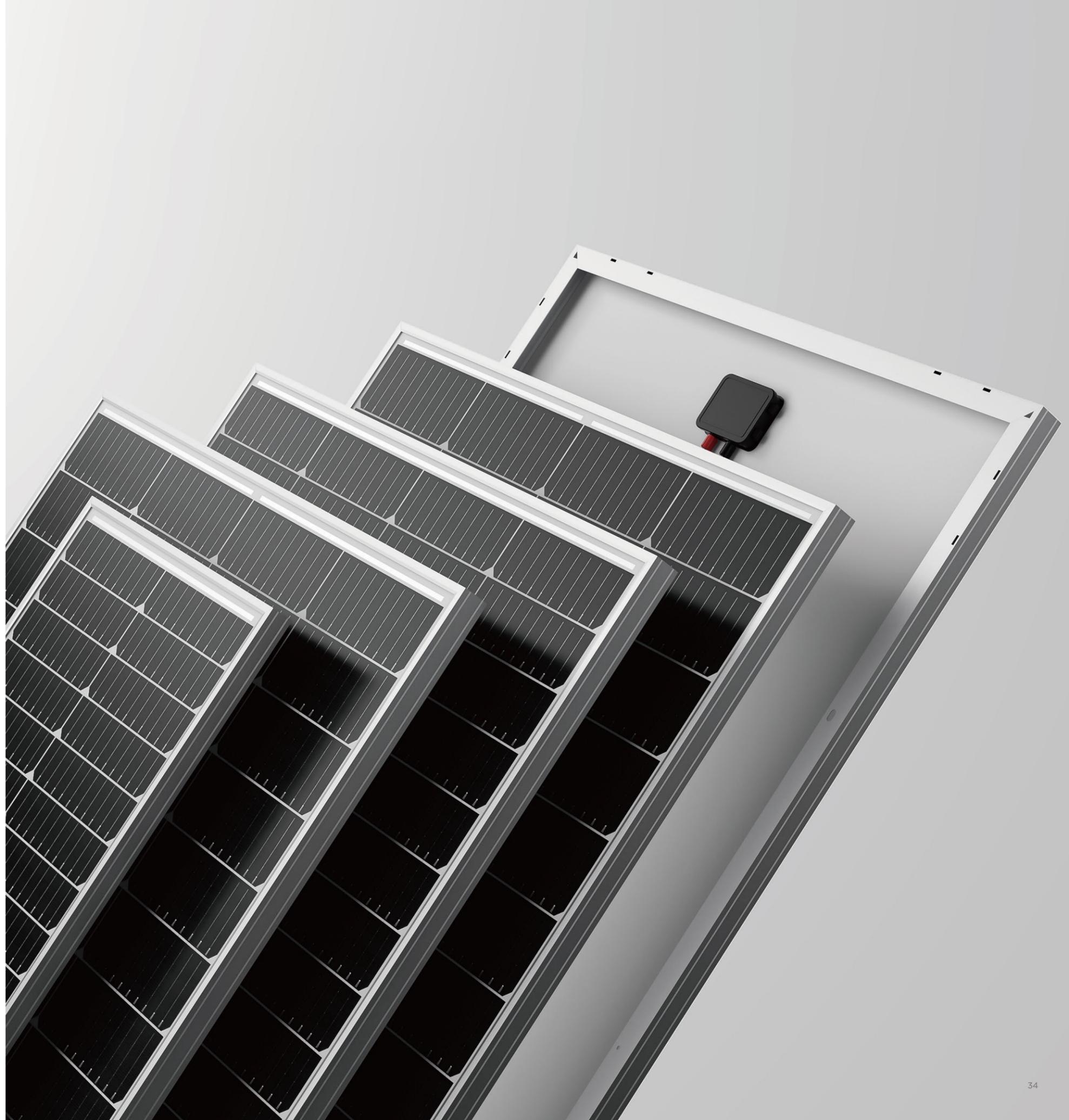
25^{Year}

Linear Power Warranty

22[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE6-30M	30W	380×450×25mm / 1.76kg
SE6-40M	40W	540×450×25mm / 2.55kg
SE6-50M	50W	625×445×25mm / 2.92kg
SE6-60M	60W	715×445×25mm / 3.34kg
SE6-70M	70W	840×445×30mm / 3.92kg
SE6-100M	100W	770×668×30mm / 5.40kg
SE5-120M	120W	1170×580×30mm / 7.13kg
SE6-150M	150W	1150×668×30mm / 8.10kg



OUR PRODUCTS

EVO F SERIES

Flexible photovoltaic modules, which can be easily bent and folded, adapt to various complex shapes and installation environments. They possess excellent weather resistance and ultraviolet (UV) protection, enabling them to maintain stable performance in harsh conditions, thereby extending their lifespan. Through the use of lightweight materials and advanced design concepts, the weight of flexible modules is significantly reduced, facilitating their transport and installation.

500^W

Max Output Power

182^{mm}

Solar PV Cell Type

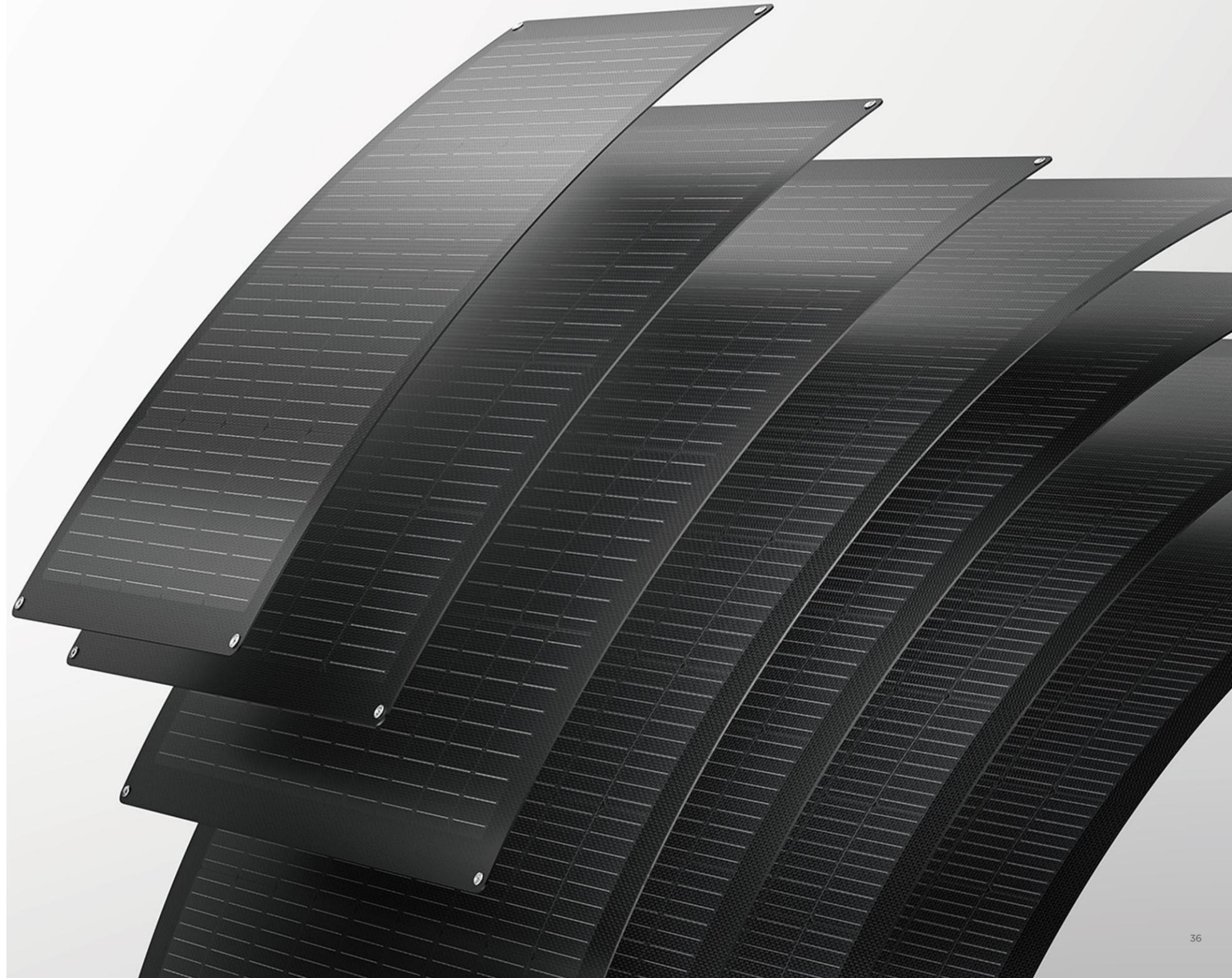
10^{Year}

Linear Power Warranty

20.52[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE5-100M	100W	645×790×3mm / 1.86kg
SE5-160M	160W	1035×790×3mm / 3.90kg
SE5-200M	200W	1235×790×3mm / 3.56kg
SE5-210M	210W	1330×790×3mm / 3.84kg
SE5-300M	300W	1230×1160×3mm / 5.21kg
SE5-370M	370W	1525×1160×3mm / 6.46kg
SE5-400M	400W	1895×1076×3mm / 7.42kg
SE5-450M	450W	1895×1175×3mm / 8.10kg
SE5-500M	500W	2265×1076×3mm / 8.45kg



OUR PRODUCTS

EVOT SERIES

Evo T Series are customized bifacial double glass transparent solar PV modules with 5%-70% transmittance, which is specially desinged photovoltaic panels for applications like Building-integrated Photovoltaics(BIPV), greenhouse, sunroom, solar carport, solar farms or Agriculture Photovoltaic(Agri-PV), the modules can be customized in different output power, dimension, thickness, shape, color and installation frame.

340^W

Max Output Power

182^{mm}

Solar PV Cell Type

25^{Year}

Linear Power Warranty

70[%]

Module Efficiency

Module	Maximum Power	Size / Weight
SE5-20HBD	160-180W	2088×1128×5mm / 27kg
SE5-32HBD	240-260W	1767×1040×6mm / 25kg
SE5-40HBD	320-340W	2088×1128×5mm / 27kg



OUR PRODUCTS

EVO Z SERIES

Our foldable solar photovoltaic modules are innovatively designed for easy transportation and storage, with strong outdoor durability and adaptability to harsh environments. The components are compact and lightweight, easy to move by one person, equipped with adjustable brackets, and easy to install. Excellent portability, suitable for outdoor exploration and emergency power supply. Shock resistant and dust-proof design ensures stable operation in complex environments.

400^W

Max Output Power

182^{mm}

Solar PV Cell Type

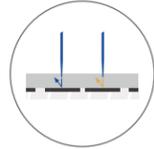
2

Year
Linear Power Warranty

Module	Maximum Power	Folding / Unfold / Weight
SE5-100M	100W	585×577×35mm / 1154×585×25mm / 4.97kg
SE5-120M	120W	585×651×35mm / 1301×585×25mm / 5.60kg
SE5-200M	200W	585×589×55mm / 2195×585×25mm / 9.50kg
SE5-240M	240W	585×651×55mm / 2442×585×25mm / 10.52kg
SE5-300M	300W	603×774×55mm / 2252×774×25mm / 13.6kg
SE5-400M	400W	973×627×55mm / 2348×973×25mm / 16.8kg



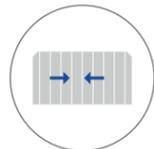
WE PAY ATTENTION TO DETAIL



N-type technology

N-type Modules combine leading HJT & TOPCon technology, SMBB and half-cell. N-type solar cell has zero LID/LeTID risk, and make modules to be higher reliable, higher bifaciality, higher efficiency and longer lifetime.

Combining with the benefits of crystalline silicon and amorphous silicon thin-film technologies, HJT technology has excellent photoabsorption and passivation effects, as well as outstanding efficiency and performance.



Multi-busbar cell technology

Increased cell bus-bar means more paths for electric charges, so there would be less resistance losses and more emitted electrons can be captured, thus it can increase power output by 2%.



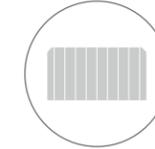
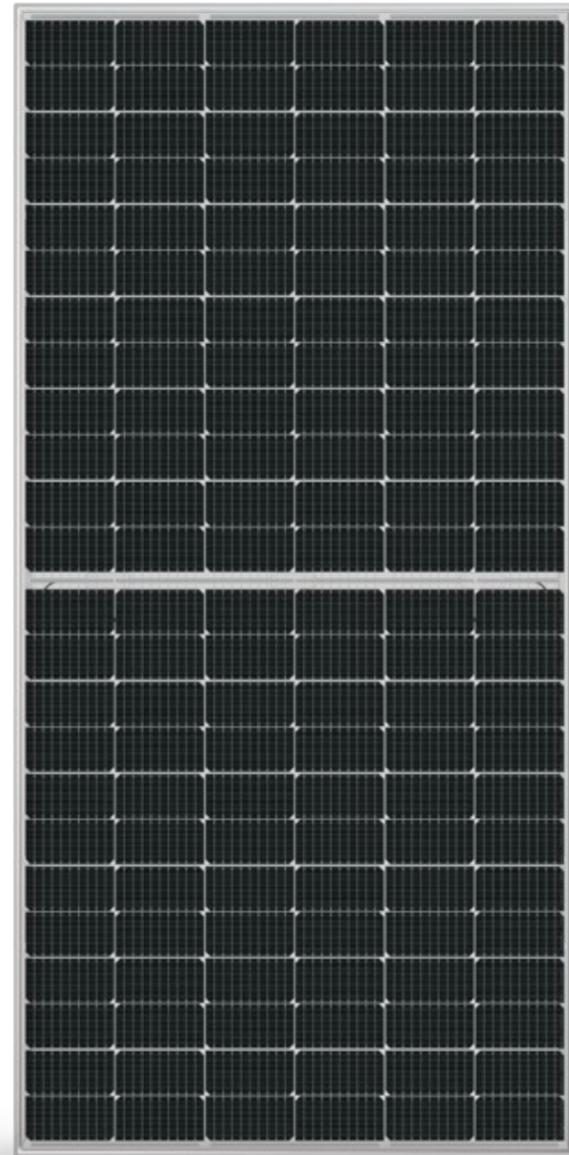
Split module design

Better performance in shading conditions with split module design.



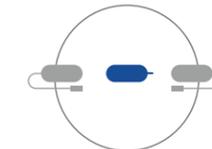
Half-cut cell technology

Through reducing length of cell spacing, two half-cut cells can provide higher electric current, thus enhance 3% of power output. The output of two 9 bus-bar half-cut cells are even higher than one 12 bus-bar full cell.



Bifacial cell technology

Generate electricity from backside of solar cell with environmental light reflections, brings additional 5%-30% more power generation.



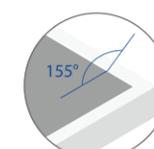
1500V DC

High system voltage of J-box and glasses, reduce PV system cost.



Ultra high strength frame

Specially designed for bifacial dual-glass series, passed 7200 Pa (front) mechanical load test, reducing shading with no C side design for Split module design short frame. (Note: *120 Cells series)



Special frame design with anti-fouling patent

155-degree angle, excellent anti-fouling performance, improve long-term power generation performance.

Our Business

PROJECT ENGINEERING

As a global comprehensive clean energy solutions provider, SunEvo endeavors to enhance investment return for our customers by continuously optimizing LCOE of solar energy. After more than a decade of steadfast development, our business has covered project lifecycle operation and support, as well as a diverse energy distribution, such as solar energy, wind energy, biomass energy and geothermal energy.

Following the national 'One Belt, One Road' strategy, SunEvo with 10 years of experience in energy engineering and international trade, comprehensively gives impetus for connecting traditional and new energy, centralized and distributed energy, energy generation and consumption, through which we are able to form such diverse energy layout and grow into a global and integrated clean energy solution provider step by step.



PROJECT CASE

RESIDENTIAL

Thousands of houses around the globe are equipped with SunEvo solar PV modules, so they can now enjoy the clean power with a lower electricity bill and moreover, make profits from them.



PROJECT CASE

COMMERCIAL

Either self-consumption or selling to the grid, commercial projects provide system owners with a new way of investment, in which module plays a key role. And SunEvo was, is, and will always be a reliable partner which you won't regret to choose.



PROJECT CASE

UTILITY SCALE

With years of professional experience, SunEvo can provide you the perfect module product for your perfect projects so as to maximize your benefits of investments.

