



Company Profile

One-Stop Zero-Carbon Energy Solution Provider

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Q-SUN Group

11 Years of Solar Module Manufacturing

2 Production Facilities Worldwide

4 GW Annual Capacity

1 Million+ Users in 50+ Countries

Global Leader in Clean Energy Solutions



Annual Capacity

4 GW+

Production Base

2

Covered Countries

50

About US



(Q-Sun Solar Dongtai Production Base)

Development History



About US

- The Q-SUN Solar Dongtai facility spans a total area of **100 acres**
- Has a professional team of around **500 employees**
- Annual sales in 2025: **2 GW** Annual revenue: **€180 million**



Global Brand Layout



About Q-SUN



Q-Sun Regional Offices



📍 (Q-SUN Nanjing Global Marketing Center)



★(Q-SUN Bangladesh)



★(Q-SUN Spain)



📍 (Q-SUN Dongtai Office)



★ (Q-SUN Pakistan)



★(Q-SUN Tunisia)

Certificates & Certifications

Certified Smart Manufacturing Quality Assurance by Leading Institutions:

- CQC Certification
- TÜV Rheinland Certification
- CE Certification
- Fire Resistance Uni Class1
- ISO Certification
- TÜV (including Salt Spray, Ammonia Resistance, Sand Dust)
- IECEE Certification
- MCS
- INMETRO
- EPD (Norway)



Product classification

Solar Cell

The Philippine factory



Solar module



Energy storage



Planned Module and Cell Manufacturing Plant

- Q-SUN Solar expands localized production in Europe, building an advanced **PV module and cell** factory with **TOPCon & PERC** technologies

Projected Production Capacity: **2 GW +2GW per year**

Estimated Timeline: **Module, Q3 2026**

Cell, Q1 2027



Technological Development

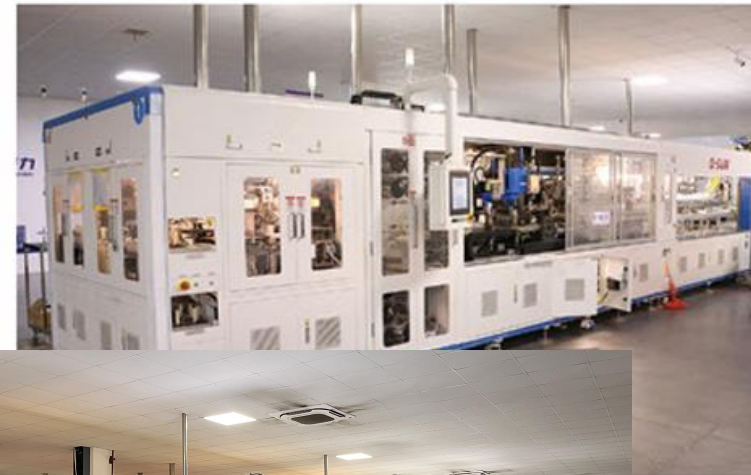
- High-efficiency automated production line
- From PERC to TOPCon technology , Q-SUN Solar has consistently remained at the forefront of solar technology advancements.

PERC

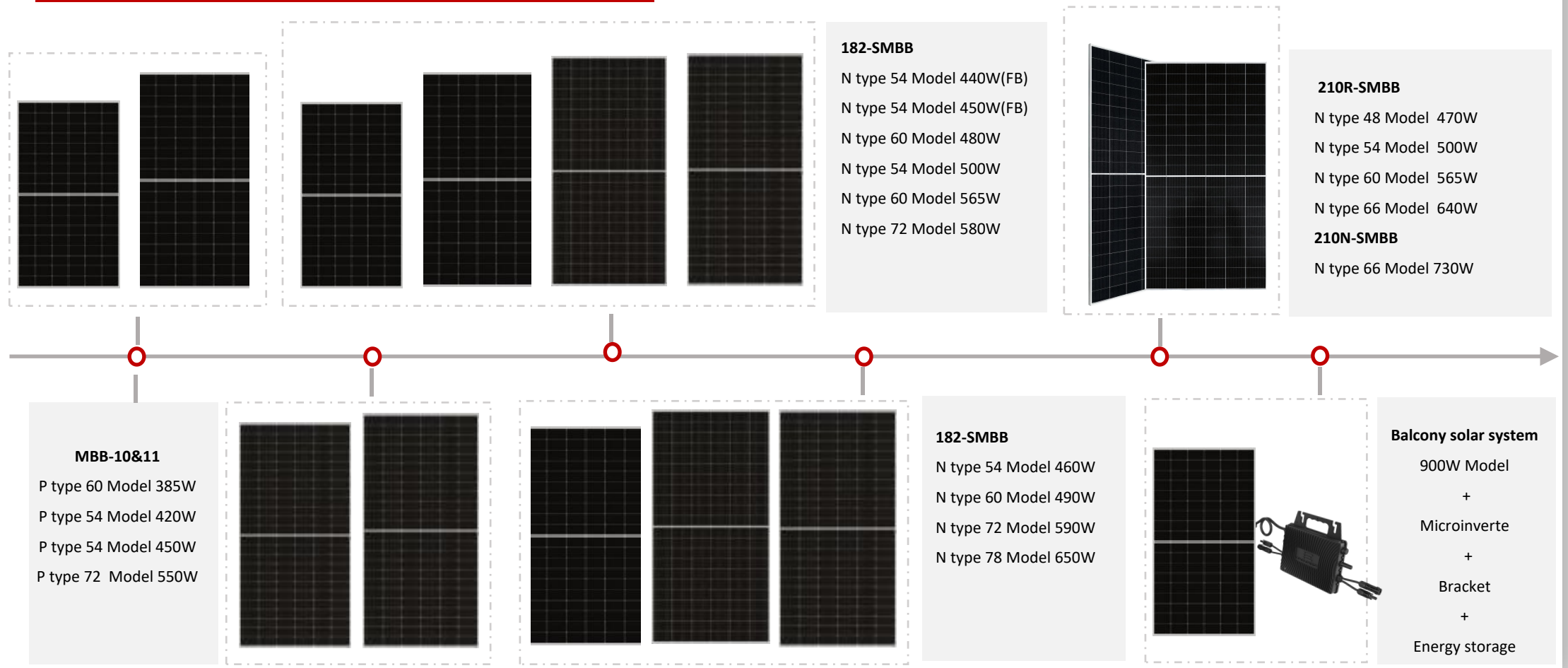
23.47% world efficiency record of PERC (2021)

TOPCon

Since 2018, TOPCon technology has been widely applied, achieving a cell efficiency of up to 25.9%.



Products Roadmap



Q-SUN Solar Module Series

Residential



Onyx Series

Full Black 420-460W



C&I



Mercury Series

TOPCON 460-720W

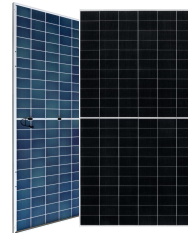


Utility



Nebula Series

TOPCON 590-720W



High-Altitude



Hima Series

440-460W / 570-590W



Balcony solar system

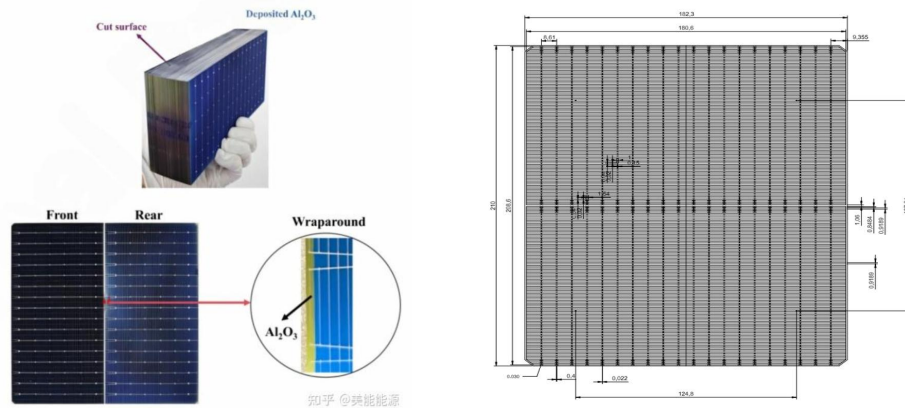


Easy Solar kit

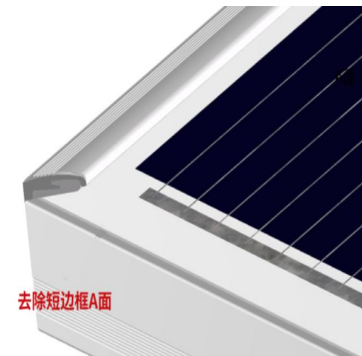
900W & Microinverter & Energy storage



Module Highlights



Temperature Coefficient	
Short Circuit Current(Isc)	+0.04%/°C
Open Circuit Voltage(Voc)	-0.25%/°C
Nominal Max. Power(Pmax)	-0.29%/°C
NOCT	42 ± 2°C



Edge passivation: Reduce edge defect recombination; Prevent short circuits; Improve cell efficiency.

MBB cell: Q-Sun implements **210R/20BB & 210N/24BB cell**, achieving higher module power and more stable generation than conventional 16/18BB cells.

Low temperature coefficient: -0.29%/°C - smaller temperature coefficient, more stable high-temp performance.

Anti-dust frame design: Reduces dust accumulation, improves power generation efficiency, and minimizes power loss caused by shading.

Core Products-Solar Panels

FULL BLACK Series

ONYX Series

(TOPCon N-type 1762*1134mm)

- ★Black mesh 430~460W
- ★White mesh 440~470W

Bringing on the European market high power and highly efficient PV panels, Q-SUN Solar full-black series modules maximize system power and performance.



Core Products-Solar Panels

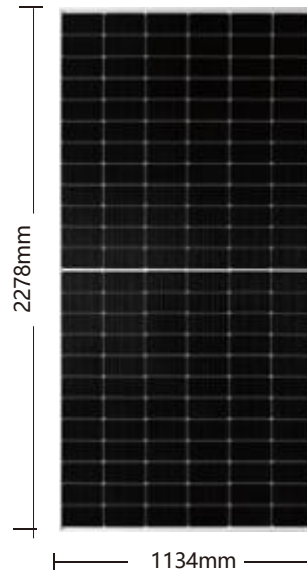
TOPCon Series

MERCURY Series

- N-Silicon reduces LID and LETID: less than 1% first year degradation and 0.4% annual degradation
- Better temperature coefficient ($-0.29\%/^{\circ}\text{C}$)
- Excellent low irradiance performance
- 30 years power output warranty

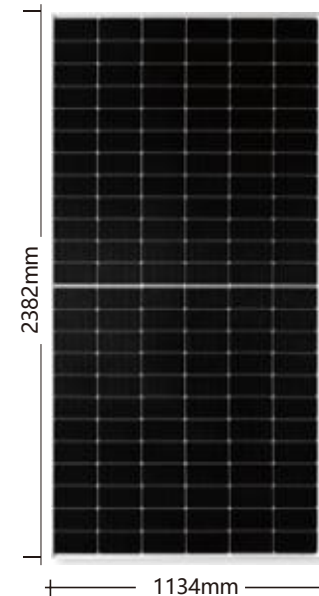
580-590W

Mono/Bifacial Modules



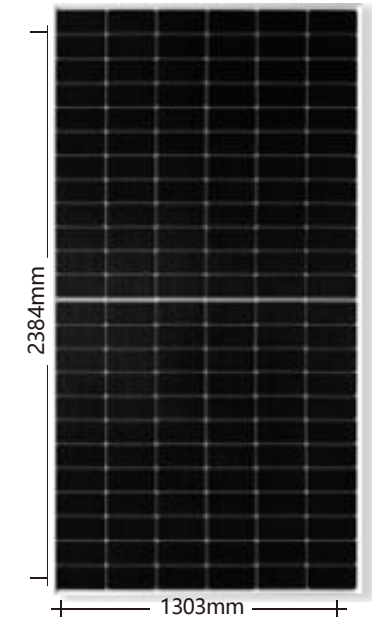
620-640W

Mono/Bifacial Modules



710-730W

Mono/Bifacial Modules



Core Products-Solar Panels



Hima Series 440-460w/570-590w

High efficiency N - type Double glass Hima Module

- **Glass : 2.8mm front +2.8mm back**
- **Front Load Capacity10000 Pa; Back Load Capacity8500 Pa**
- Stronger properties, PID resistance, reduced hot spot loss
- Through Hail Testing:45mm Diameter, Impact Speed 30.7m/s
- 400 thermal cycles from 85°C to -40°C
- Bifacial module, more power generation

New in 2026 — 1/4 CUT CELL technology

Venus Series 640-750w

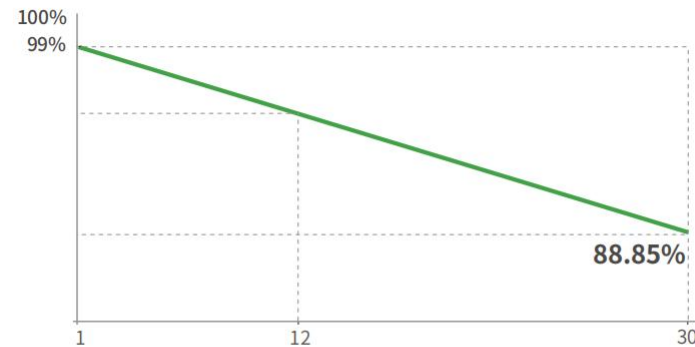


1/4 Cut Cell is a mainstream high-efficiency PV module technology. It cuts standard cells into 4 equal slices with low-current & multi-parallel design to reduce loss and boost power & reliability.

- **Cutting:** Ultra-precise laser cuts 182/210mm wafers into 4 equal small cells.
- **Electrical performance:** Current reduced to 1/4 ($\approx 4-5A$), voltage unchanged Resistance loss (I^2R) reduced to 1/16 (6.25%) 4-zone independent parallel connection
- **Higher efficiency:** 2%–3% higher efficiency than half cells; power up to 670W–770W+.
- **Anti-shading & anti-hotspot:** Local shading affects only 1/4 area; lower hotspot & ablation risk.
- **Better reliability:** Stronger against cracking; slower long-term degradation.
- **Excellent low-light & high-temp performance:** Stable power generation in weak light; less power loss at high temperatures.

New in 2026 — 1/4 CUT CELL technology

Venus Series 640-660w 2382×1134×30 mm



12 Year
Product Warranty

30 Year
Linear Power
Warranty

1%
First-year
Degradation

0.35%
Annual Degradation
Over 30 Years

Cell Type	N- type Mono-crystalline
No. of Cells	264 (66×4)
Dimensions	2382×1134×30 mm
Weight	32.5 kg
Front Glass	2.0 mm, Anti-reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Connector Type	JK03M / JK03M2 / Others*
Output Cables (Including Connector)	4.0 mm ² (+): 600 mm , (-): 400 mm or Customized Length

*MC4-EVO2 available upon request and subject to availability

Energy Storage

- Q-SUN Solar is located in Gaoyou, Yangzhou, with an energy storage product manufacturing base. The facility has full-process manufacturing capabilities, from battery cells and BMS to system integration, ensuring the delivery of high-performance and highly reliable energy storage products through optimized upstream supply chain coordination and strict quality management.

Annual Capacity 3Gwh



(Energy storage production line)

Core Products-Residential Energy Storage System



3KWH(25.6V/100AH)



5KWH(51.2V/100AH)



10KWH(51.2V/200AH)

Core Products-Commercial and Industrial Energy Storage System



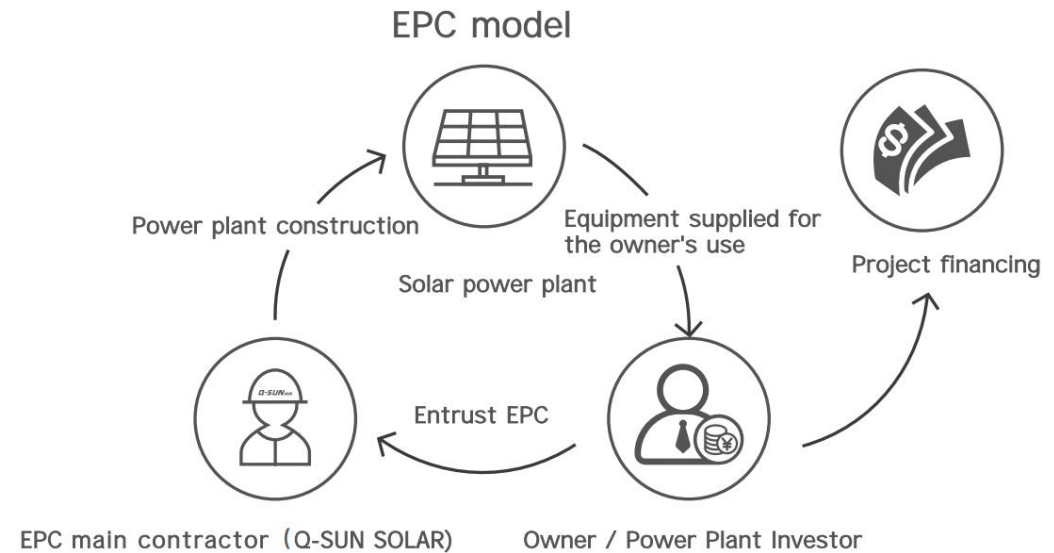
PARAMETERS

ONE-STOP CARBON NEGATIVE PROVIDER
OF ENERGY SOLUTIONS

Product Name		QCL125KW-261KWH
Category	Item	Technical Specification
Battery Parameters	Cell Type	LiFePO ₄
	Cell Specifications	3.2V/314Ah
	Cell Assembly	1P260S
	Nominal Capacity	261.248kWh
	Nominal Voltage	DC 832V
	Battery Voltage Range	DC 650-949V
	Maximum charge current	157A
	Maximum discharge current	157A
AC Grid-Connected Parameters	Rated charge/discharge C-rate	0.5C
	Rated power	125kW
	Maximum power	137.5kW
	Rated current	190A
	Rated AC voltage	380/400 AC(-15%~+15%)
	Grid connection	Three-Phase Four-Wire
	Rated grid frequency	50Hz/60Hz
	Charge/discharge transfer time	<100ms
	Power factor range	-0.99 ~ +0.99

One-stop power station solutions

Q-SUN SOLAR leverages its industry chain advantages to provide high-performance modules and comprehensive solutions for power stations. From site selection to design, construction, and maintenance, the company uses intelligent management and digital methods to ensure maximum returns for investors.



Product and Project Cases



8MW ▲

Anhui Transportation Holding Group Expressway Project

Address: Anhui, China

Type: Distributed



3MW ▲

Guangdong Foshan Yineng Project

Address: Foshan, China

Type: Distributed



3.2MW ▲

Jiangsu Chengqing New Energy Project

Address: Yancheng, China

Type: Distributed



6MW ▲

Anhui Yingfa Group Project

Address: Chuzhou, China

Type: Distributed



1MW ▲

Anhui Lai'an Shenzhou Spaceship Project

Address: Lai'an, Anhui, China

Type: Distributed



6 MW ▲

Jiangsu Nanjing Ningshun Group Project

Address: Nanjing, China

Type: Distributed

Power Station Project Case

Product and Project Cases



Brand and Image



Global Exhibition



Global Exhibition



Global Exhibition



Public Charity Activities

Q-SUN Solar, in collaboration with Myanmar's energy company SANDISOLAR and several partners in the solar industry, has launched a charitable initiative aimed at providing assistance to areas in Myanmar affected by flooding. The campaign has donated more than \$100,000 worth daily supplies, demonstrating the company's commitment to social responsibility and sustainable development. This initiative also reflects Q-SUN Solar's vision of making a positive impact on society through the renewable energy sector.

“ရေဘေးအန္တရာယ် စုပေါင်းကူ”

SANDISOLAR+

မှကြီးမှူး၍

Q-SUN solar

ဦးဆောင်ပြီး

SANDISOLAR[®] Sunnix Energy
GROWATT ZEYANG
Deye Hailei
SUNGO MBO
JUST

စက်ရုံတို့နှင့်အတူ

စောင်ဒေရင်း

ကို သိန်း(5000)တန်ဖိုးရှိသော...

Q-SUN *solar*

Thanks for watching!

One-Stop Zero-Carbon Energy Solution Provider



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