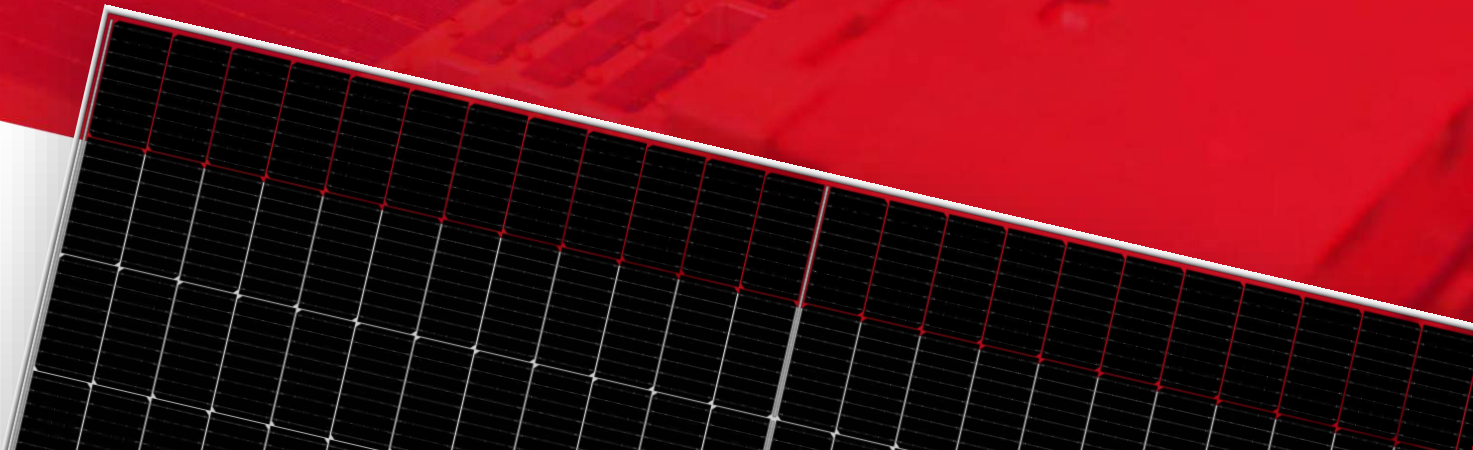




SUNOVA SOLAR

Pv Tech | Expert.

Sharing Value with SUNOVA SOLAR
Apr. 2023



Content



01

About Sunova

02

Manufacturing

03

Product Portfolio

04

Project References

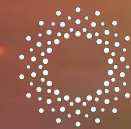
Our Goals

VISION

- *Targeting rooftop and small ground markets, we are dedicated to building Sunova into a leading one-stop technical solutions globally.*
- *We are committed to becoming the world's leading green energy supplier in PV business.*

MISSION

- *We aim to become the most user-centric energy enterprise.*



SUNOVA SOLAR

Pv Tech Expert.

Member of the board



■ William Sheng

Co-founder & CEO

Msc degree University of Newcastle, UK

- Over 15 years' experience in PV industry, focusing on overseas PV market development and layout

Past Experiences:

- VP Sales (EMEA) of China Sunergy (NASDAQ:CSUN)
- CEO of Talesun Solar (SZ002309)
- CEO of SUNOVA china



■ Mike Song

Founder & Chairman

University of New South Wales, Australia

- Over 10 years' experience in PV industry, focusing on solar cells technology and global supply chain management

Past Experiences:

- Sunova china chairman
- Australia Green Power Group founder

2023 Company Profile



10GW



Global Module
Capacity
2023 Q2

5GW



Global
Accumulative
Shipment

10+



Global Sales &
Service Offices

20+



Shipping
Countries

100+



Global
Partners

Milestone



- Sunova Solar Technology Co., Ltd founded in Wuxi, China.
- Setting up 1st **200 MW** production facility.

2016



- Sunova set up the second **200MW** production line

2018



- Production capacity expanded to **600 MW**.
- Adopt large wafer size technology.
- **Top 10** most popular module manufacturers in Brazil awarded by Greener.

2020



- Producing **TOPCON** modules and expanding **3 GW** capacity.
- Building **warehouses** in Rotterdam / Itaja / Milan.

2022



- Sunova Group AUS PTY LTD founded in Australia.

2017



- The Brazilian branch of SUNOVA was established.
- The annual cumulative shipment reached to **500 MW**.

2019



- Production capacity expanded to **2 GW**.
- The annual cumulative shipment reached to **2 GW**.
- Sign with PINGAN, Ariel-Re and LLYOD'S.

2021



- Expanding **1.5 GW** production capacity in Vietnam factory
- Signed **20GW** high-efficiency N-type silicon wafer project in Yibin, Sichuan.
- Expanding **6GW** TOPCON/ PERC capacity in Anhui Fuyang Factory.

2023



WUXI Factory

2.5 GW Modules

1 GW 182 PERC

1 GW 182 TOPCON

0.5 GW 186 TOPCON

100 MW MODULES STORAGE

500+ EMPLOYEES



SUNOVA SOLAR

Pv Tech Expert.



Vietnam Factory

1.5 GW Modules

1.5 GW TOPCON
30 MW MODULES STORAGE
200+ EMPLOYEES



SUNOVA SOLAR

Pv Tech Expert.

THORNOVA solar



Anhui Fuyang Factory

6 GW Modules

6 GW TOPCON / PERC
1200+ EMPLOYEES



SUNOVA SOLAR

Pv Tech Expert.



Sichuan Yibin Factory

20 GW N-Type Silicon Wafer

*Under
Construction*



SUNOVA SOLAR

Pv Tech Expert.

Wuxi Yanqiao Factory Global Headquarter Base

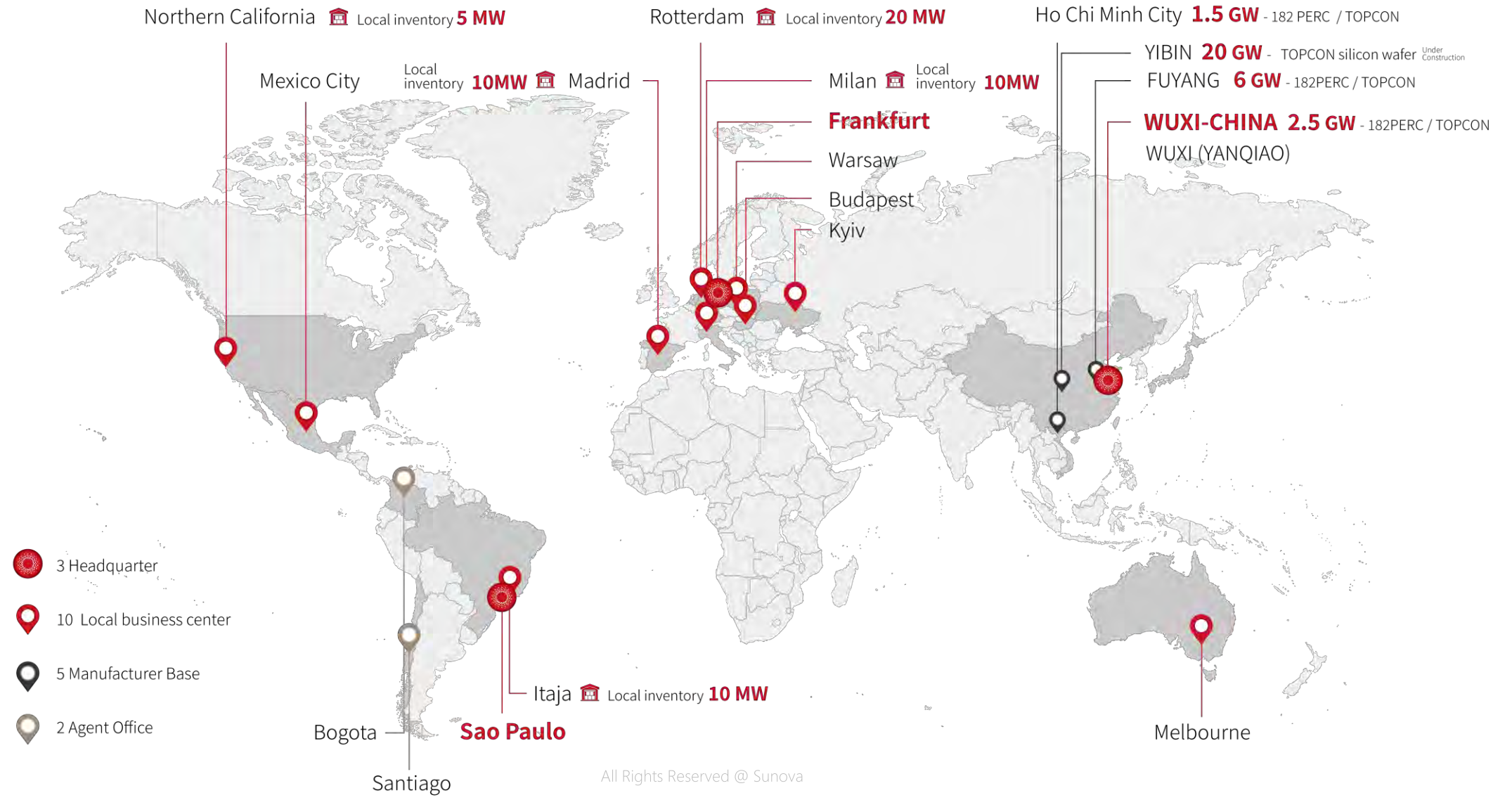
*Under
Construction*



SUNOVA SOLAR

Pv Tech Expert.

Networking




Production Process



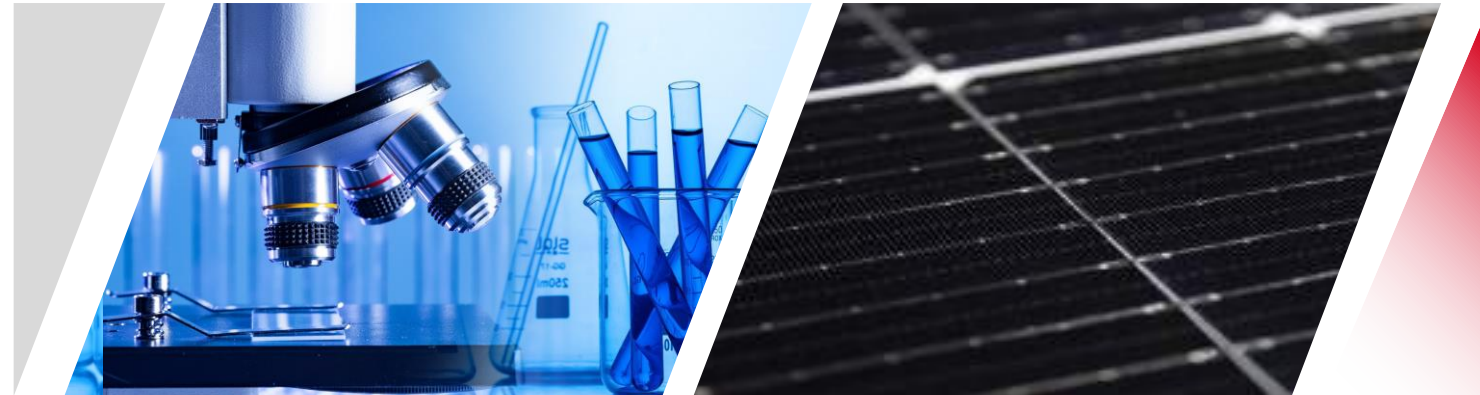
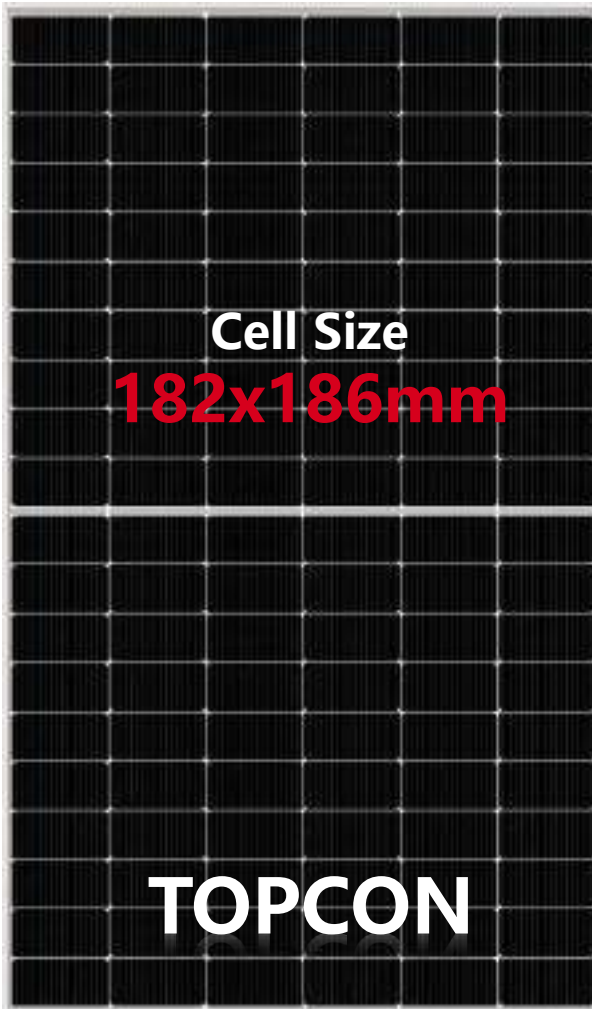
Fully automatic production lines with tier 1 using equipments
THREE EL testing to avoid the hidden micro-crack.





 **SUNOVA**

云程



50+

50+ Professional R&D talents
All with bachelor degree or above
2 PhDs and 5 masters



2000 m²

2000 m² R&D and testing Lab



10%

10% of margin for R&D investment

Sunova Series

A Rich Product Portfolio to Meet the Diversified Needs of Customers



Excellent low irradiance performance.



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.



Industry leading lowest thermal co-efficient of power.



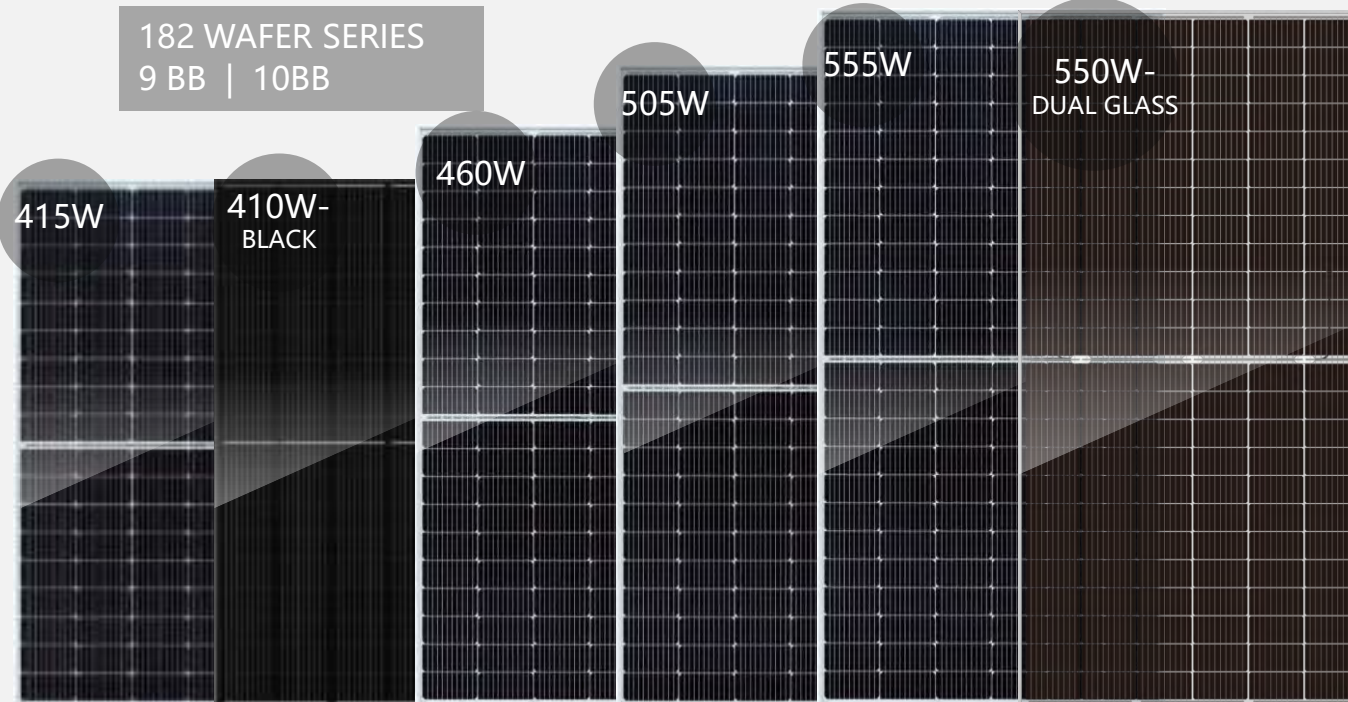
Better light trapping and current collection to improve module power output and reliability.



Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



100% triple EL test enabling remarkable reduction of hidden crack rate of modules



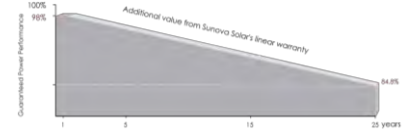
Half-Cell Mono PERC Module

HI-KILO

(For Residential Roof-top)

182 WAFER SERIES:

SS-415-54MDH
SS-410-54MDH
SS-460-60MDH



15 YEARS
Product Warranty

25 YEARS
Linear Warranty

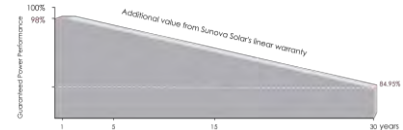
Bifacial Dual Glass Module

HI-MILO

(For C&I Roof-top)

182 WAFER SERIES:

SS-505-66MDH
SS-555-72MDH
SS-BG550-72MDH



15 YEARS
Product Warranty

30 YEARS
Linear Warranty

Performance Insurance



HI-CILO

(For Ground-mount)

210 WAFER SERIES:

SS-605-60MDH-G12
SS-670-66MDH-G12
SS-BG600-60MDH-G12
SS-BG670-66MDH-G12

Certifices



Sunova Series



Bifacial technology enables additional energy harvesting from rear side. (up to 30%)



Excellent low irradiance performance.



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.



30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module.



Better light trapping and current collection to improve module power output and reliability.



Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



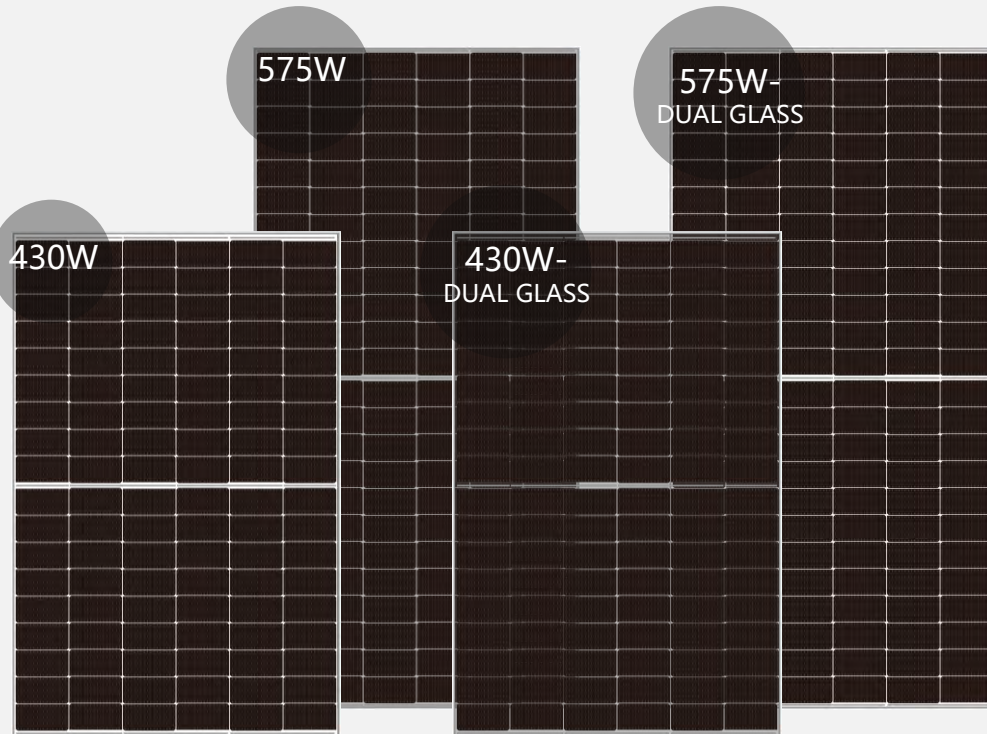
N-type solar cell has no LID naturally which can increase power generation.



Industry leading lowest thermal co-efficient of power.



100% triple EL test enabling remarkable reduction of hidden crack rate of modules.



Thor

Half-Cell Mono Module

Standard Module Linear Performance Warranty
SUNOVA N-type High Efficiency Half-Cell Mono Module Linear Performance Warranty



Bifacial Dual Glass Module

Standard Module Linear Performance Warranty
SUNOVA N-type Bifacial Double Glass Module Linear Performance Warranty



15 years Product quality & process guarantee
30 years Linear power guarantee
0.40% Annual Degradation

Performance Insurance



182 WAFER SERIES:

- SS-430-54MDH(T)
- SS-BG430-54MDH(T)
- SS-475-60MDH(T)
- SS-BG475-60MDH(T)
- SS-575-72MDH(T)
- SS-BG575-72MDH(T)
- SS-BG615-78MDH(T)

186 WAFER SERIES:

- SS-445-54MDH(T)
- SS-BG445-54MDH(T)
- SS-490-60MDH(T)
- SS-BG490-60MDH(T)
- SS-535-66MDH(T)
- SS-BG538-66MDH(T)
- SS-605-72MDH(T)
- SS-BG605-72MDH(T)

Certifices



Utility

www.sunova-solar.com

Module: Hi-milo Series - 545 W / 2279x1134x35mm / 1200mm cable length

Project	Location	EPC	Total MW	Estimated time to connect to the grid
De Dreef	De Dreef, Valthermond, The Netherlands	Perpetum	14.1	March 2023
Doorsneeweg	Doorsneeweg, Nieuwe Pekela, The Netherlands	Goldbeck	1.7	May 2023
Heino I	Kanaaldijk Zuid, Heino, The Netherlands	Goldbeck	9.1	May 2023
Heino II	Kanaaldijk Zuid, Heino, The Netherlands	Perpetum	7.3	May 2023
Hollandscheveld I	Meerboomweg, Hollandscheveld, The Netherlands	Perpetum	27.0	May 2023
Hollandscheveld II	Meerboomweg, Hollandscheveld, The Netherlands	Perpetum	24.9	May 2023
Wanneperveen	Zomerdijk, Wanneperveen, The Netherlands	Goldbeck	33.4	July 2023
Wolvega	Chroomweg, Wolvega, The Netherlands	Perpetum	5.3	May 2023

Total MW of Powerfield Project 122.8

Data prediction after grid connection



Annual electricity generation

157 million kWh



Equivalent to planting trees

62 million



Annual CO2 emission reduction

156,000 tones

Utility

122.8 MW,

De Dreef, Valthermond, The Netherlands

Reden Solar (Developer)

Module: Hi-milo Series - 550 W

Project	Location	EPC	Total MW	Estimated time to connect to the grid
RS90 / Kakinou	Voie D651E - Lieu-dit Lanot - Route de Lanot 40090 UCHACQ ET PARENTIS	Reden Technique	15.72	May 2023
Total MW of Reden Solar Project			15.72	

Data prediction after grid connection



Annual electricity generation

20 million kWh



Equivalent to planting trees

8 million



Annual CO2 emission reduction

20,000 tones

Module: Hi-milo Series - 550 W / 2279x1134x35mm / 1200mm cable length

Project	Location	developer	Total MW	Estimated time to connect to the grid
Oltenita 1	Oltenita, Calarasi County, Romania	Solar Ulmeni	4.550	April 2023
Oltenita 2	Oltenita, Calarasi County, Romania	PC Sun Energy Production	4.375	April 2023
Total MW of WALDEVAR Energy SRL Project			8.925	

Data prediction after grid connection



Annual electricity generation

11.5 million kWh



Equivalent to planting trees

4.4 million



Annual CO2 emission reduction

11,000 tones

Utility

8.92 MW,

Oltenita, Calarasi County, Romania

Utility

4 MW,

São Paulo, SP, Brazil





SUNOVA SOLAR

Pv TechExpert.

Small utility

1 MW,

Poland



Small utility

100 kW,
Goiânia-GO, Brazil



550W



Small Utility

49.5 kW



Poland

C&I

www.sunova-solar.com

C&I

2.6 MW,
Zhangjiagang, China



C&I

1.7 MW,
Jiangyin, China



C&I

443 kW,
Goiânia-GO, Brazil



440 W

C&I Under
Construction

250KW 

Orbassano Italy

C&I Under
Construction

220.14 kW



Germany



SUNOVA SOLAR

Pv Tech Expert.

C&I

107.8 kW

Module: 550 W (MILO)

Elias Fausto – São Paulo



C&I

107.8 kW

Module: 550 W (MILO)

Sorocaba – SP



C&I

49.95 kW

Rzeszów, Poland





SUNOVA SOLAR

Leading one stop PV Supplier

C&I

28.8 kW



Dąbie Poland



Residential

www.sunova-solar.com

Residential

80 kW,
Liaocheng, China



540 W



SUNOVA SOLAR

Pv Tech Expert.

Residential

40 kW



Sicily, Italy

Residential

39.6 kW



Jordanów, Poland

Residential

9.9 kW,
Legnica, Poland



450 W

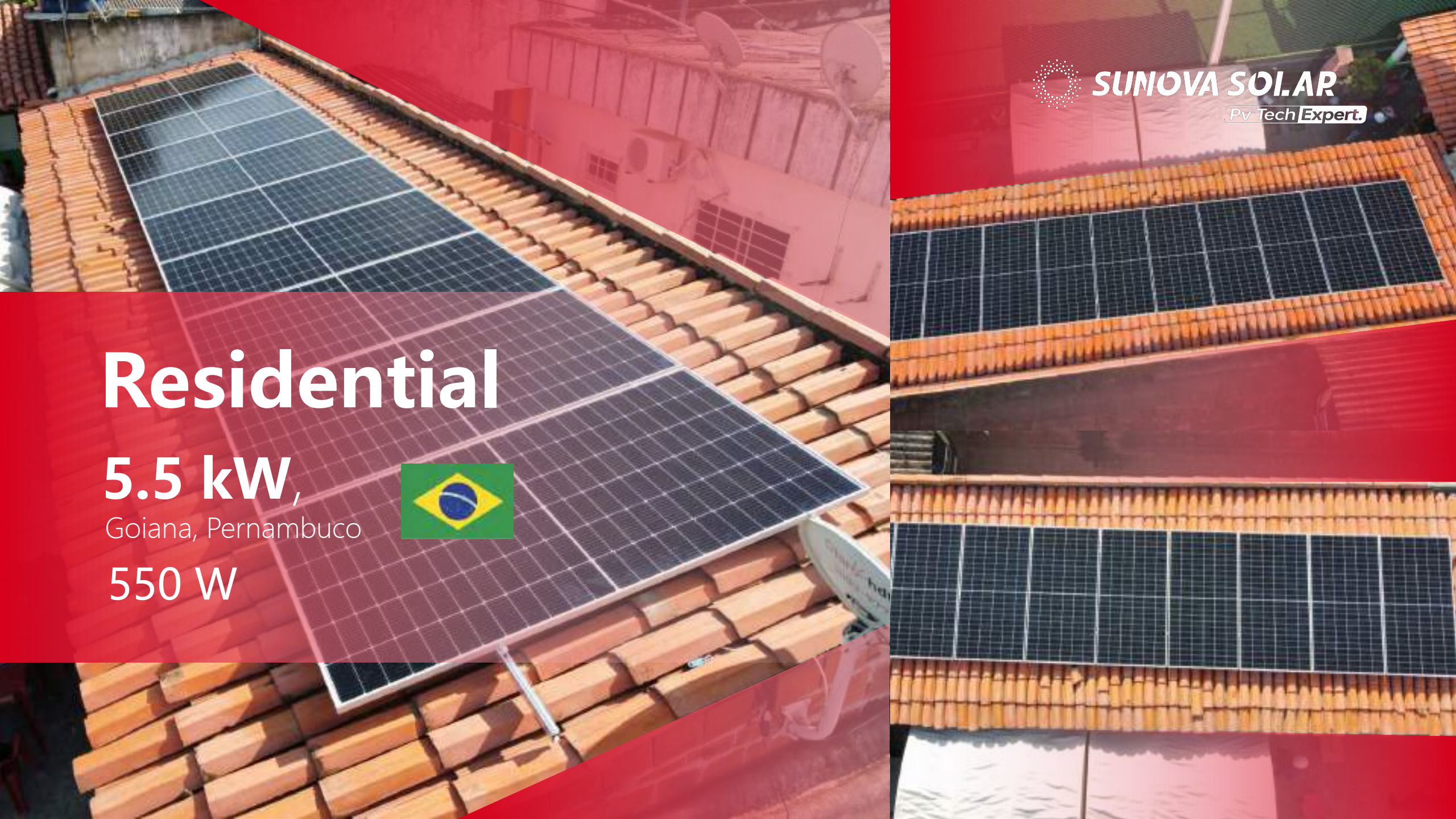


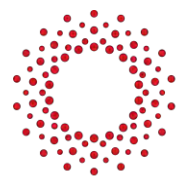
Residential

5.5 kW,
Goiana, Pernambuco



550 W





SUNOVA SOLAR

Pv Tech Expert.



Make It Happen

www.sunova-solar.com | 🔍