TIGERSOLAR

PRODUCT CATALOG

TIGER SOLAR Co.,Ltd

Global Photovoltaic Solution Provider

Website: Tiger Solar (tigersolarglobal.com)

Website

TIGER SOLAR

Offers Global
One-Stop Services

ABOUT US

In 2017, the management team completed the acquisition of Celestica Group's photovoltaic module production base located in the Laem Chabang Free Zone in Thailand, and renamed the company Tiger Solar. Following the acquisition, the factory successively upgraded its photovoltaic module manufacturing technology and production capacity, achieving a module production capacity of 2.5 GW. Since then, Tiger Solar has been providing high-quality photovoltaic modules to the global market, including many Fortune 500 companies in the United States.

Starting from 2023, Tiger Solar has engaged in a deep cooperation with ZY Solar in Jingdezhen, Jiangxi Province, China， leveraging ZY Solar production base to manufacture high-standard photovoltaic modules for export to the global market.

To accelerate industry coverage and global service, in 2025, Tiger Solar partnered with Japan's CIC to invest in a 2GW high-efficiency photovoltaic module production line in Shimonoseki, Japan. The products will primarily be sold to the United States and European countries.

Tiger Solar positions itself as a global supplier of high-quality photovoltaic modules, while also serving as a photovoltaic system integrator, providing integrated photovoltaic solutions to customers worldwide.

China Factory Locates in Jingdezhen City, Jiangxi Province. It is operated by ZY Solar and has an annual production capacity of 3GW of high-efficiency photovoltaic modules. The base is compatible with PERC, TOPCon, and HJT module types. The products are currently mainly exported to countries in Europe, Japan, South Korea, the Middle East, and Africa.

Japan Factory Locates in the CIC industrial Park in Shimonoseki, Japan. The base has an annual production capacity of 2GW of high-efficiency photovoltaic modules. It is operated under a model where Tigersolar invests in equipment and provides technical guidance, while the CIC team is responsible for the operations. The base mainly produces high-efficiency modules in large-size specifications of TOPCon type and the products are primarily exported to the America and Canada.

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Series Transformer

ENERGY STORAGE

Energy Storage

POWER STATION MAINTENANCE

Power Station Maintenance

TIGERSOLAR

CHASE THE LIGHT AND GATHER ENERGY

Light up a Better Life

TIGER SOLAR MODULE

▶▶▶

TG-HDN-**430-450**

Double Glass

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.

Module's color can be customized

108 (2*54)
Maximum number of cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
ISO 45001: 2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-TOPCON Full Black

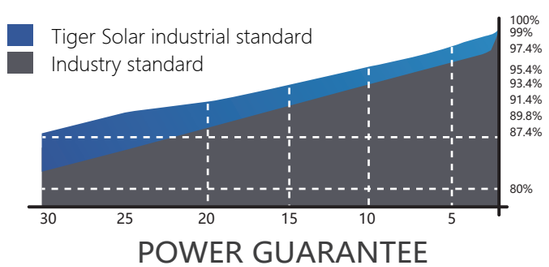
Generation superiority
Whole life cycle, better power generation performance.

Snowstorm-resistant
Superior wind and snow load capacity, perfect to cope with the test of harsh environment.

Good low light performance
Better spectral response under low light conditions, substantially increasing PV power generation.

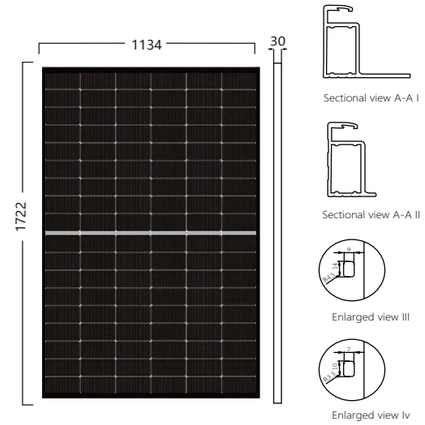
Low water permeability
Water permeability is almost zero, with high strength resistance to chemical reactions.

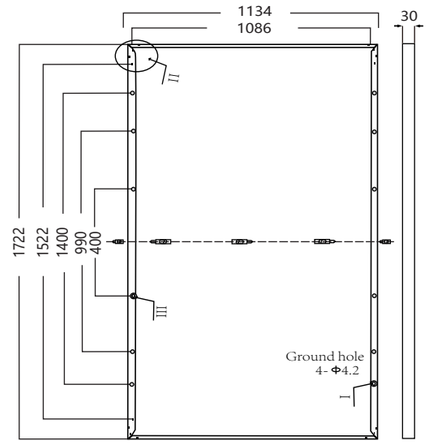
15 years Product Warranty
30 years Linear Power Warranty



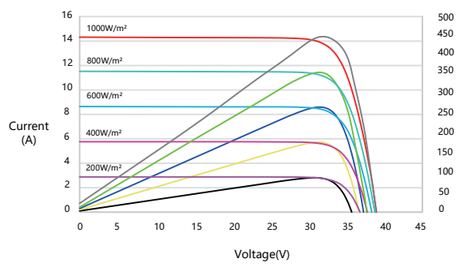
POWER GUARANTEE

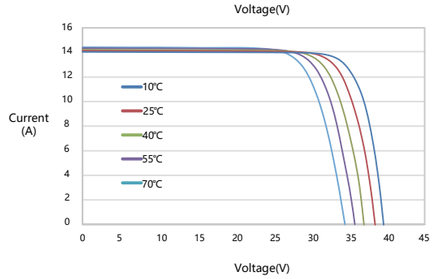
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	430Wp	440Wp	450Wp
Voltage at Pmax	31.47V	31.67V	33.39V
Current at Pmax	13.66A	13.89A	13.48A
Open-circuit voltage	38.13V	38.47V	39.97V
Short-circuit current	14.17A	14.25A	13.94A
Module Efficiency(%)	22.02%	22.53%	23.04%
Operating temperature range	-40℃~+85℃		
Max. system voltage	1000/1500VDC (IEC)		
Max. series fuse rating	25A		
Power tolerance	0~+5%		
Temperature coefficient of Pmax	-0.29%/℃		
Temperature coefficient of Voc	-0.25%/℃		
emperature coefficient of Isc	0.045%/℃		
Nominal operating cell temperature	45±2℃		

STC: irradiance 1000W/m², module temperature 25℃, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20℃, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	108 (2*54)
Dimensions	1722*1134*30mm
Weight	27KG
Glass	2 mm, High Transmittance Coated Glass
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length: (+): 300mm, (-): 300mm; Or Customerized

*Because the continuous innovation, research and product upgrades, the contents of this product specification are allowed to change without prior notice. These contents may contain some deviation, and are not guaranteed.

This data is not specific to one module, nor is part of the sale activities, but is used to compare different models of module.

Regarding technical changes and specific explanations of test conditions, our company reserves the right of final interpretation.

PACKAGE STANDARD

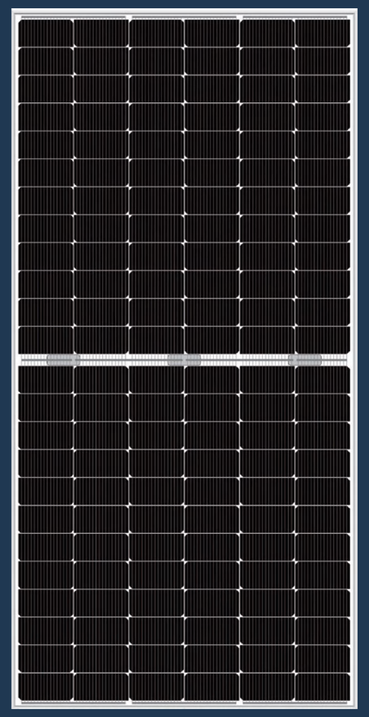
Container	40 HQ
Size Per Pallet (mm)	1939*1110*1280
Module Per Package	36 Pieces/Pallet
Quantity Loaded	26 Pallets/Container 936 Pieces/Container

*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HDN-**580-590**

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.



144 (2*72)
Maximum number of half cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
ISO 45001: 2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-TOPCON Double Glass

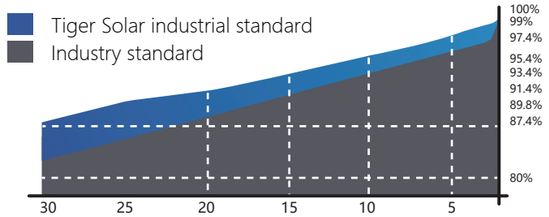
Generation superiority
Whole life cycle, better power generation performance.

Snowstorm-resistant
Superior wind and snow load capacity, perfect to cope with the test of harsh environment.

Good low light performance
Better spectral response under low light conditions, substantially increasing PV power generation.

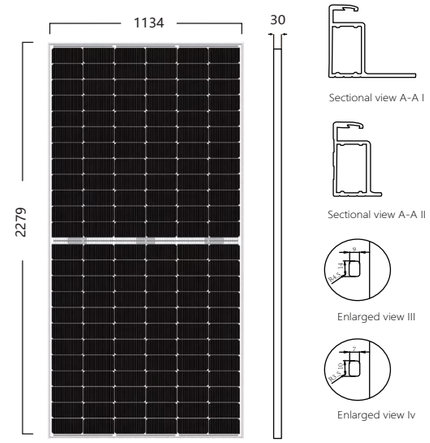
Low water permeability
Water permeability is almost zero, with high strength resistance to chemical reactions.

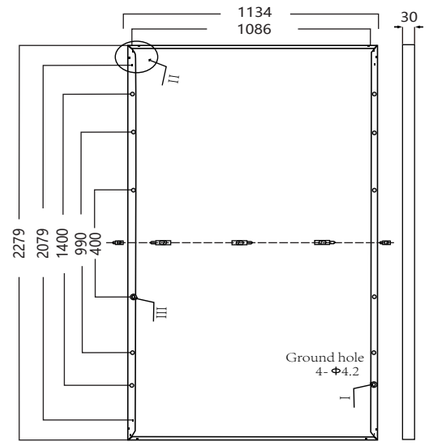
15 years Product Warranty
30 years Linear Power Warranty



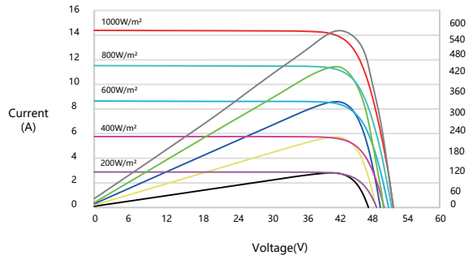
POWER GUARANTEE

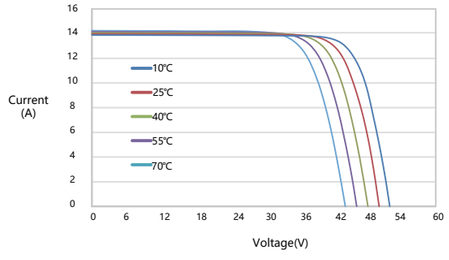
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	580Wp	585Wp	590Wp
Voltage at Pmax	42.65V	42.83V	43.01V
Current at Pmax	13.60A	13.66A	13.72A
Open-circuit voltage	51.46V	51.66V	51.86V
Short-circuit current	14.38A	14.44A	14.50A
Module Efficiency(%)	22.50%	22.60%	22.80%
Operating temperature range	-40℃~+85℃		
Max. system voltage	1000/1500VDC (IEC)		
Max. series fuse rating	30A		
Power tolerance	0~+5%		
Temperature coefficient of Pmax	-0.29%/℃		
Temperature coefficient of Voc	-0.25%/℃		
emperature coefficient of Isc	0.045%/℃		
Nominal operating cell temperature	45±2℃		

STC: irradiance 1000W/m², module temperature 25ºC, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20ºC, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	144 (2*72)
Dimensions	2279*1134*30mm
Weight	32KG
Glass	2 mm, High Transmittance Coated Glass
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length: (+): 300mm, (-): 300mm; Or Customerized

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PACKAGE STANDARD

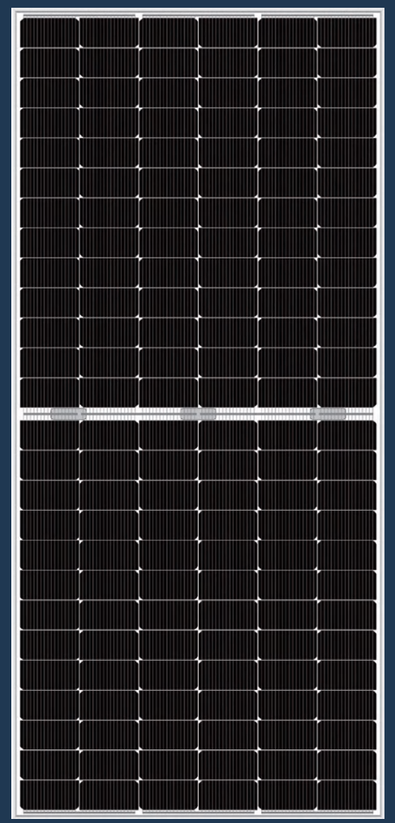
Container	40 HQ
Size Per Pallet (mm)	2300*1110*1280
Module Per Package	36 Pieces/Pallet
Quantity Loaded	20 Pallets/Container 720 Pieces/Container

*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HDN-**620-640**

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.



156 (2*78)
Maximum number of half cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
ISO 45001: 2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-TOPCON Double Glass

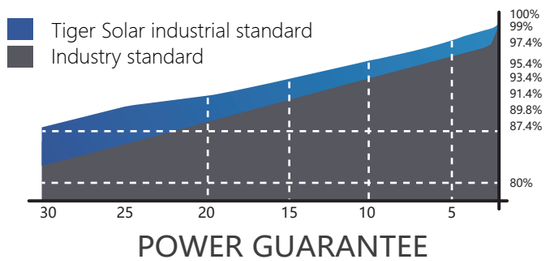
High power
Large cell design, high power for superior power generation.

Snowstorm-resistant
Superior wind and snow load capacity, perfect to cope with the test of harsh environment.

High density
High-density packaging technology for longer module service life.

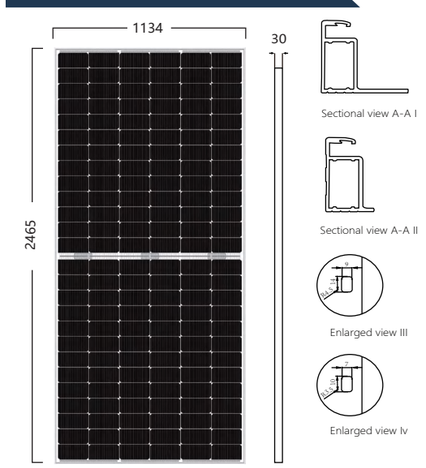
High power generation
Higher power per block, higher power generation capacity installed in the effective area.

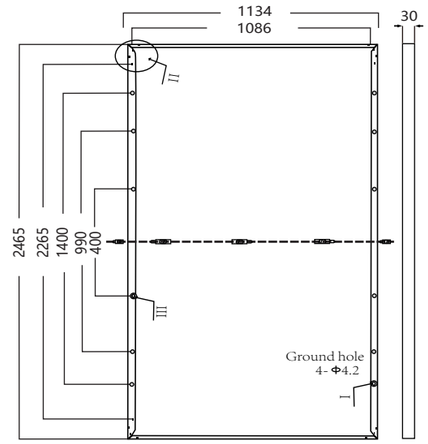
15 years Product Warranty
30 years Linear Power Warranty



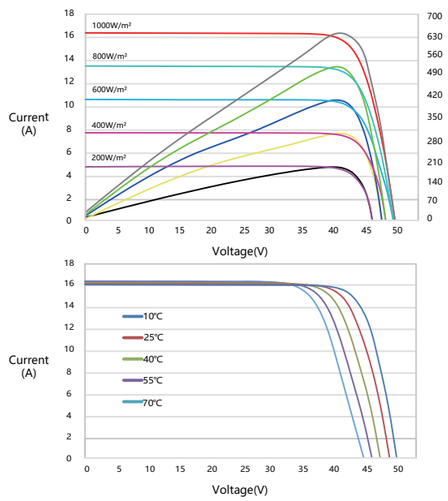
POWER GUARANTEE

MODULE SIZE





I-V CURVE



ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	620Wp	625Wp	630Wp	635Wp	640Wp
Voltage at Pmax	45.93V	46.10V	46.26V	46.44V	46.61V
Current at Pmax	13.50A	13.56A	13.62A	13.68A	13.74A
Open-circuit voltage	55.58V	55.72V	55.88V	56.00V	56.14V
Short-circuit current	14.19A	14.27A	14.35A	14.43A	14.51A
Module Efficiency(%)	22.20%	22.40%	22.50%	22.71%	22.89%
Operating temperature range	-40℃~+85℃				
Max. system voltage	1500VDC (IEC)				
Max. series fuse rating	30A				
Power tolerance	0~+5%				
Temperature coefficient of Pmax	-0.30%/℃				
Temperature coefficient of Voc	-0.25%/℃				
emperature coefficient of Isc	0.045%/℃				
Nominal operating cell temperature	45±2℃				

STC: irradiance 1000W/m², module temperature 25ºC, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20ºC, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	156 (2*78)
Dimensions	2465*1134*30mm
Weight	34.6KG
Glass	2 mm, High Transmittance Coated Glass
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length: (+): 300mm, (-): 300mm; Or Customerized

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PACKAGE STANDARD

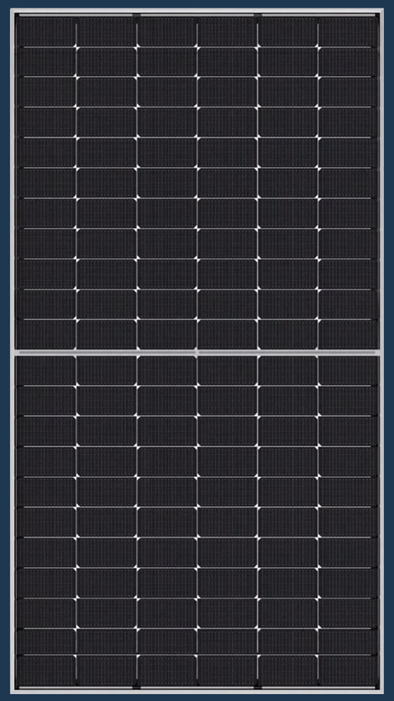
Container	40 HQ
Size Per Pallet (mm)	2495*1120*1261
Module Per Package	36 Pieces/Pallet
Quantity Loaded	18 Pallets/Container 648 Pieces/Container

*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HDN-**605-630**

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.



132 (2*66)
Maximum number of cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
ISO 45001: 2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-TOPCON Double Glass

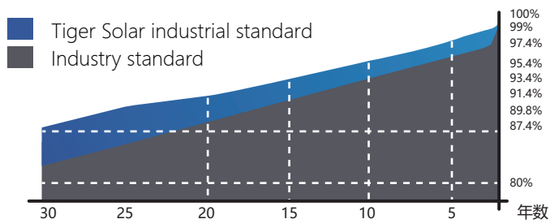
Generation superiority
Whole life cycle, better power generation performance.

Snowstorm-resistant
Superior wind and snow load capacity, perfect to cope with the test of harsh environment.

Good low light performance
Better spectral response under low light conditions, substantially increasing PV power generation.

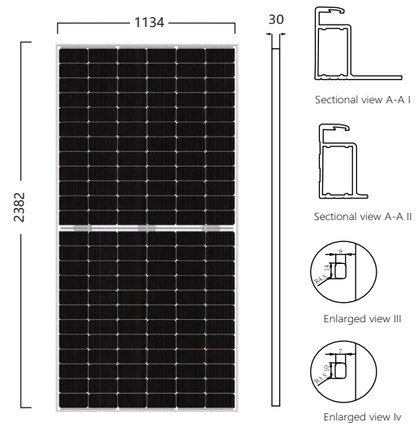
Low water permeability
Water permeability is almost zero, with high strength resistance to chemical reactions.

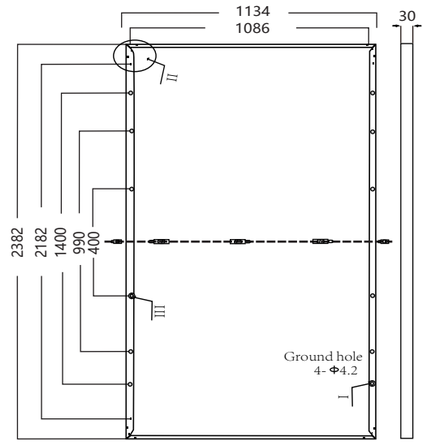
15 years Product Warranty
30 years Linear Power Warranty



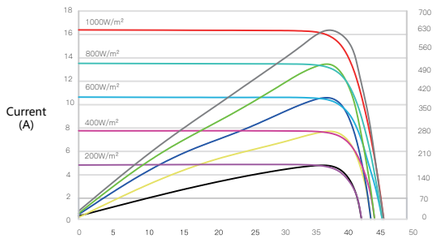
POWER GUARANTEE

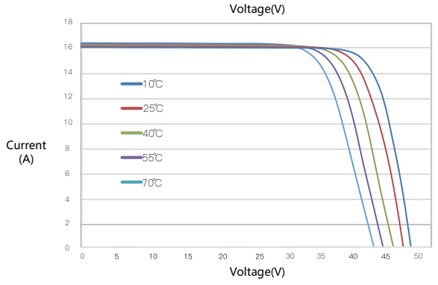
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	605Wp	610Wp	615Wp	620Wp	625Wp	630Wp
Voltage at Pmax	40.31V	40.46V	40.60V	40.74V	40.88V	41.02V
Current at Pmax	15.01A	15.08A	15.15A	15.22A	15.29A	15.36A
Open-circuit voltage	48.48V	48.68V	48.88V	49.08V	49.28V	49.48V
Short-circuit current	15.90A	15.96A	16.02A	16.08A	16.14A	16.20A
Module Efficiency(%)	22.40%	22.60%	22.80%	23.00%	23.10%	23.30%
Operating temperature range	-40℃~+85℃					
Max. system voltage	1000/1500VDC (IEC)					
Max. series fuse rating	35A					
Power tolerance	0~+5%					
Temperature coefficient of Pmax	-0.29%/℃					
Temperature coefficient of Voc	-0.25%/℃					
emperature coefficient of Isc	0.045%/℃					
Nominal operating cell temperature	45±2℃					

STC: irradiance 1000W/m², module temperature 25℃, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20℃, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	132 (2*66)
Dimensions	2382*1134*30mm
Weight	32.4KG
Glass	2 mm，High Transmittance Coated Glass
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length：(+): 300mm, (-): 300mm; Or Customerized

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PACKAGE STANDARD

Container	40 HQ
Size Per Pallet (mm)	2300*1131*1310
Module Per Package	36 Pieces/Pallet
Quantity Loaded	20 Pallets/Container 720 Pieces/Container

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Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HDN-**700-710**

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.

132 (2*66)
Maximum number of cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
ISO 45001: 2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-TOPCON Double Glass

High power

Large cell design, high power for superior power generation.

Snowstorm-resistant

Superior wind and snow load capacity, perfect to cope with the test of harsh environment.

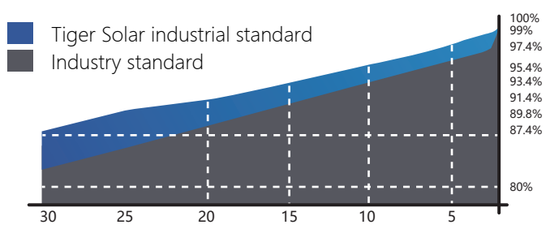
High density

High-density packaging technology for longer module service life.

High power generation

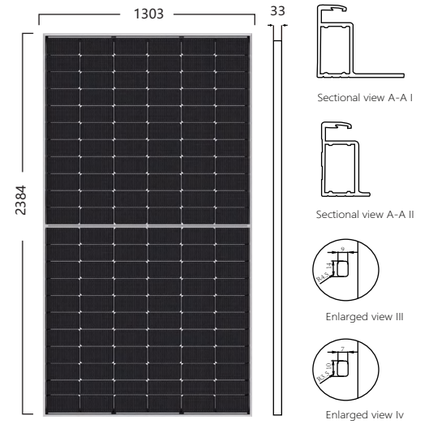
Higher power per block, higher power generation capacity installed in the effective area.

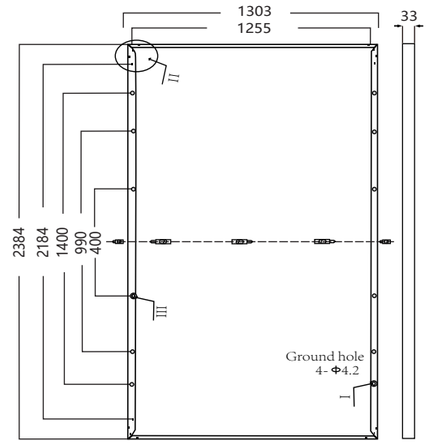
15 years Product Warranty
30 years Linear Power Warranty



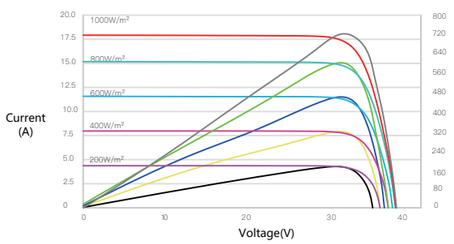
POWER GUARANTEE

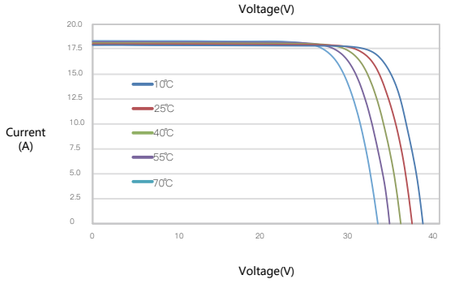
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	700Wp	705Wp	710Wp
Voltage at Pmax	39.30V	39.44V	39.58V
Current at Pmax	17.82A	17.86A	17.90A
Open-circuit voltage	47.18V	47.37V	47.56V
Short-circuit current	18.90A	18.95A	19.00A
Module Efficiency(%)	22.53%	22.69%	22.86%
Operating temperature range	-40℃~+85℃		
Max. system voltage	1000/1500VDC (IEC)		
Max. series fuse rating	30A		
Power tolerance	0~+5%		
Temperature coefficient of Pmax	-0.29%/℃		
Temperature coefficient of Voc	-0.25%/℃		
emperature coefficient of Isc	0.045%/℃		
Nominal operating cell temperature	45±2℃		

STC: irradiance 1000W/m², module temperature 25℃, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20℃, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	132 (2*66)
Dimensions	2384*1303*33mm
Weight	37.9KG
Glass	2 mm, High Transmittance Coated Glass
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length: (+): 300mm, (-): 300mm; Or Customerized

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PACKAGE STANDARD

Container	40 HQ
Size Per Pallet (mm)	1320*1130*2500
Module Per Package	33 Pieces/Pallet
Quantity Loaded	18 Pallets/Container 594 Pieces/Container

*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HDH-**730-750**

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.

132 (2*66)
Maximum number of cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
ISO 45001: 2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-HJT Double Glass

Longer life

Special material on the upper surface of the battery, longer life without polarization.

Highly efficient conversion

Three-membrane translucent, symmetrical structure, achieving efficient conversion.

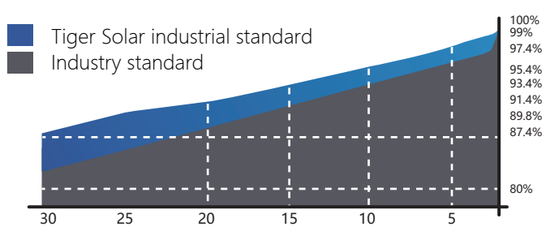
Good low light performance

More than just absorbing direct light, the excellent low irradiation performance allows for longer power generation times.

Wide range of application

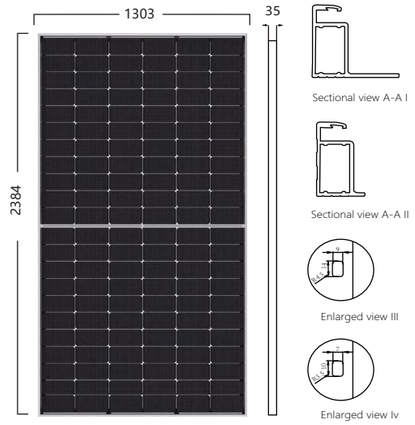
Suitable for residential buildings, chemical plants, seaside, waterside, acid rain or salt spray areas of photovoltaic power stations.

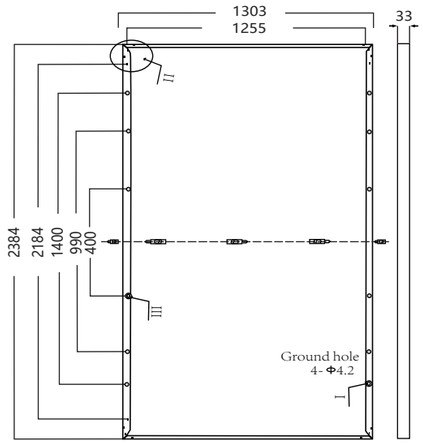
15 years Product Warranty
30 years Linear Power Warranty



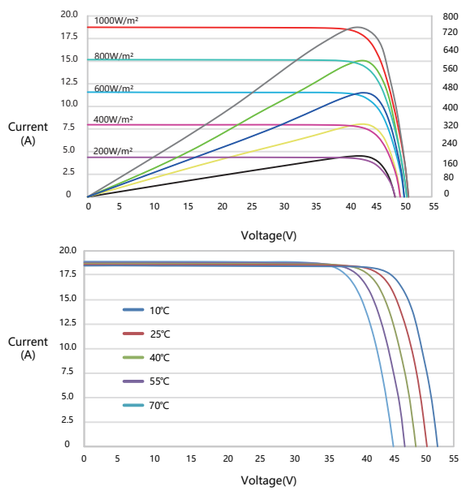
POWER GUARANTEE

MODULE SIZE





I-V CURVE



ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	730Wp	740Wp	750Wp
Voltage at Pmax	42.97V	43.26V	43.55V
Current at Pmax	16.99A	17.11A	17.23A
Open-circuit voltage	51.03V	51.32V	51.61V
Short-circuit current	17.79A	17.91A	18.03A
Module Efficiency(%)	23.50%	23.82%	24.14%
Operating temperature range	-40℃~+85℃		
Max. system voltage	1000/1500VDC (IEC)		
Max. series fuse rating	35A		
Power tolerance	0~+5%		
Temperature coefficient of Pmax	-0.29%/℃		
Temperature coefficient of Voc	-0.25%/℃		
emperature coefficient of Isc	0.045%/℃		
Nominal operating cell temperature	45±2℃		

STC: irradiance 1000W/m², module temperature 25ºC, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20ºC, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	132 (2*66)
Dimensions	2384*1303*33mm
Weight	38.5KG
Glass	2 mm, High Transmittance Coated Glass
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length: (+): 300mm, (-): 300mm; Or Customerized

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Regarding technical changes and specific explanations of test conditions, our company reserves the right of final interpretation.

PACKAGE STANDARD

Container	40 HQ
Size Per Pallet (mm)	1310*1110*2500
Module Per Package	33 Pieces/Pallet
Quantity Loaded	18 Pallets/Container 594 Pieces/Container

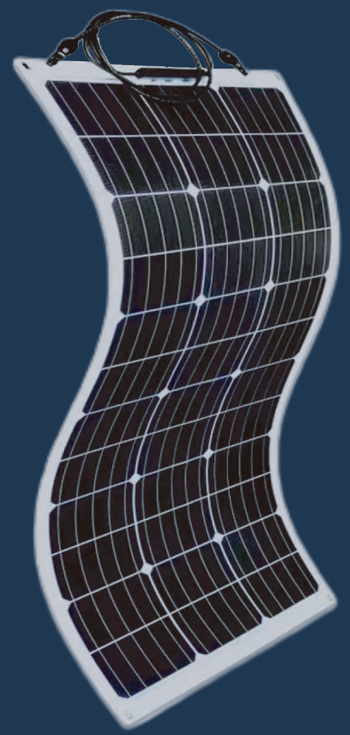
*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HSP-**200**

Glassless

Mono crystalline series module. Select the best quality P-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.



54 (2*27)
Maximum number of half cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
BS OHSAS 18001:2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

Flexible Module

Low weight

Extremely low weight, greatly satisfies the roof application scenarios of color steel tiles, wood and other roofs with special requirements for load.

Bendable

Design in glassless, high polymer composite material is used on the front.Light, thin and soft,can be bent up to 248°.

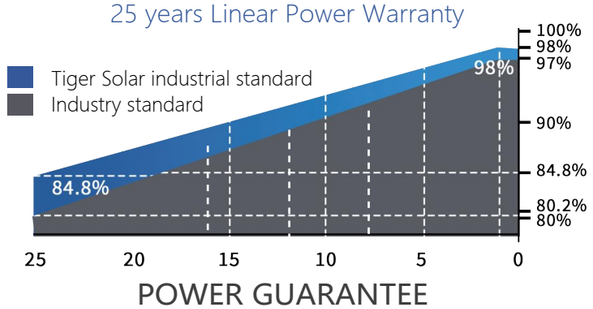
High fit

More matchable with the actual installation scenarios, fitting all kinds of roof angles.

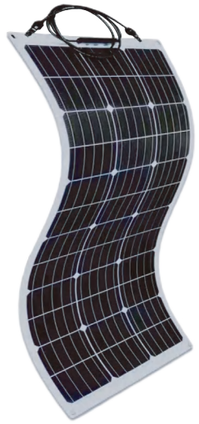
Easy installation

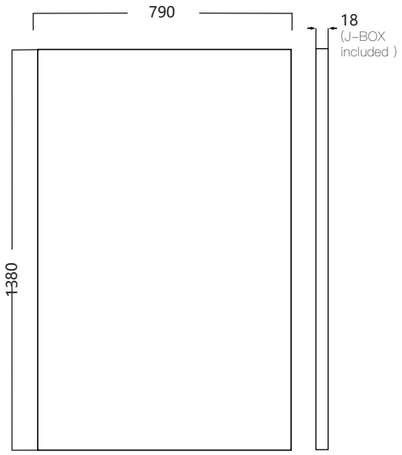
No need to use bracket installation, simple and convenient.

12 years Product Warranty
25 years Linear Power Warranty

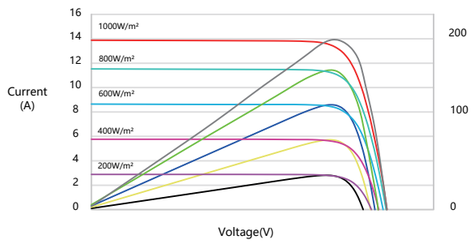


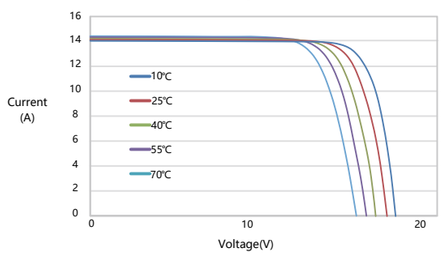
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	200Wp
Voltage at Pmax	15.7V
Current at Pmax	12.80A
Open-circuit voltage	18.9V
Short-circuit current	13.46A
Module Efficiency(%)	20.87%
Operating temperature range	-40℃~+85℃
Max. system voltage	600VDC
Max. series fuse rating	20A
Power tolerance	0~+5%
Temperature coefficient of Pmax	-0.34%/℃
Temperature coefficient of Voc	-0.25%/℃
emperature coefficient of Isc	0.040%/℃
Nominal operating cell temperature	43±2℃

STC: irradiance 1000W/m², module temperature 25℃, air quality AM=1.5, according to EN 60904-3. Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20℃, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Number of Half Cells	54 (2*27)
Module Size	1380*790*18mm(J-BOX Included)
Module Weight	3.7KG
Upper Surface Glass Material	Glassless
Frame	White PV Backsheet
J-Box	Protection Class IP67
Output Cables	TüV1×4.0mm², Cable Length: (+): 700mm, (-): 700mm; Or Customerized

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PACKAGE STANDARD

Container	40 HQ
Size Per Pallet (mm)	1430*1085*929
Module Per Package	70 Pieces/Pallet
Quantity Loaded	32 Pallets/Container 2240 Pieces/Container

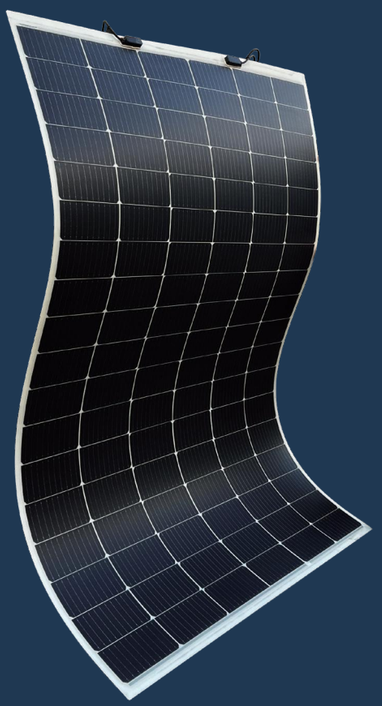
*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HSP-**400-410**

Glassless

Mono crystalline series module. Select the best quality P-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.



108 (2*54)
Maximum number of cells

0-5W
Positive tolerance

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
BS OHSAS 18001:2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

Flexible Module

Low weight

Extremely low weight, greatly satisfies the roof application scenarios of color steel tiles, wood and other roofs with special requirements for load.

Bendable

Design in glassless, high polymer composite material is used on the front.Light, thin and soft,can be bent up to 248°.

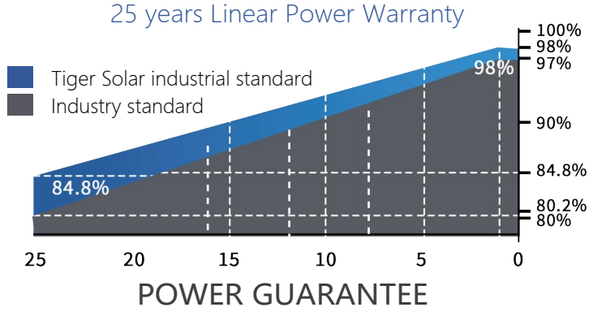
High fit

More matchable with the actual installation scenarios, fitting all kinds of roof angles.

Easy installation

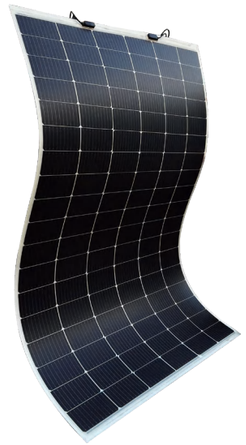
No need to use bracket installation, simple and convenient.

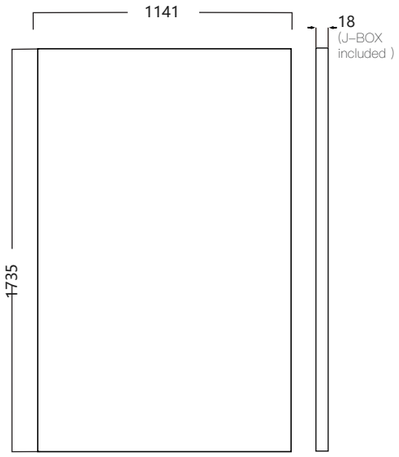
12 years Product Warranty
25 years Linear Power Warranty



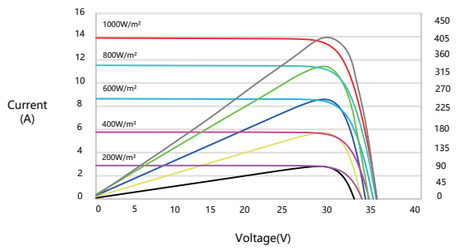
POWER GUARANTEE

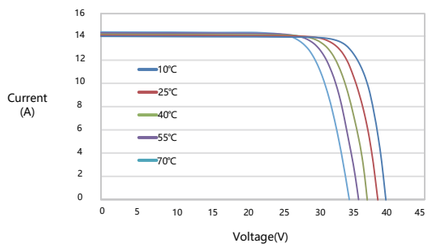
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	400Wp	410Wp
Voltage at Pmax	31.17V	31.49V
Current at Pmax	12.84A	13.04A
Open-circuit voltage	37.75V	38.05V
Short-circuit current	13.83A	13.99A
Module Efficiency(%)	20.40%	20.71%
Operating temperature range	-40℃~+85℃	
Max. system voltage	1000VDC	
Max. series fuse rating	20A	
Power tolerance	0~+5%	
Temperature coefficient of Pmax	-0.34%/℃	
Temperature coefficient of Voc	-0.25%/℃	
emperature coefficient of Isc	0.040%/℃	
Nominal operating cell temperature	43±2℃	

STC: irradiance 1000W/m², module temperature 25℃, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20℃, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	108 (2*54)
Dimensions	1735*1141*18mm(J-BOX Included)
Weight	6.7KG
Glass	Glassless
Frame	White PV Frame
J-Box	Protection Class IP67
Output Cables	TüV1×4.0mm², Cable Length: (+): 500mm, (-): 500mm; Or Customerized

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PACKAGE STANDARD

Container	40 HQ	
Size Per Pallet (mm)	1800*1100*1280	
Module Per Package	70 Pieces/Pallet	
Quantity Loaded	26 Pallets/Container	1820 Pieces/Container

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Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HDN-**265-270**

Double Glass

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.

Weight 9.5kg

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
BS OHSAS 18001:2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-TOPCON Ultra-thin Glass

1.1mm

The world's first breakthrough 1.1mm thick double glass module with superior impact resistance.

Easy installation

The whole module is at least 18%～20% lighter than the regular double glass module in the market. Light and easy to install.

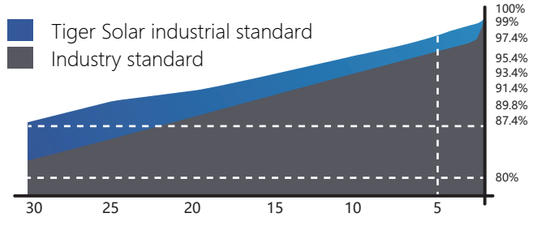
Fast heat-dissipation

Good heat dissipation, 50% better heat dissipation with back glass. More continuous and stable power generation.

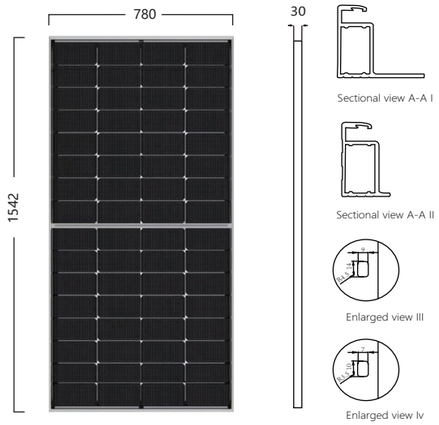
Highly fire-resistant

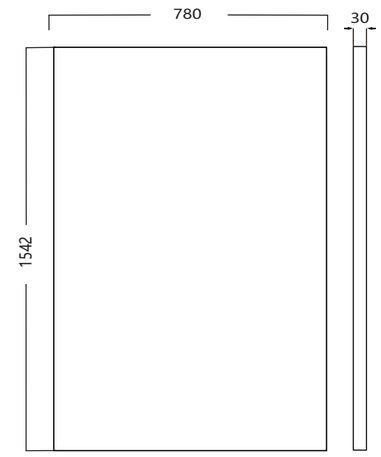
Good fire prevention. Overall module fire prevention up to the highest Class A level.

15 years Product Warranty
30 years Linear Power Warranty

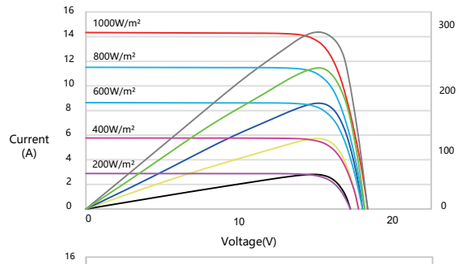


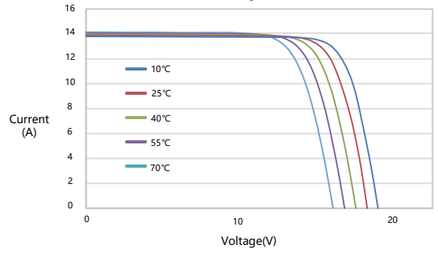
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	265Wp	270Wp
Voltage at Pmax	19.33V	19.55V
Current at Pmax	13.71A	13.85A
Open-circuit voltage	23.19V	23.35V
Short-circuit current	14.29A	14.35A
Module Efficiency(%)	22.03%	22.00%
Operating temperature range	-40℃~+85℃	
Max. system voltage	1000/1500VDC (IEC)	
Max. series fuse rating	25A	
Power tolerance	0~+5%	
Temperature coefficient of Pmax	-0.29%/℃	
Temperature coefficient of Voc	-0.25%/℃	
emperature coefficient of Isc	0.045%/℃	
Nominal operating cell temperature	45±2℃	

STC: irradiance 1000W/m², module temperature 25℃, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20℃, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	64 (2*32)
Dimensions	1542*780*30mm
Weight	9.5KG
Glass	1.1mm High Transmittance Glass
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length: (+): 300mm, (-): 300mm; Or Customerized

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PACKAGE STANDARD

Container	40 HQ
Size Per Pallet (mm)	1570*1110*920
Module Per Package	36 Pieces/Pallet
Quantity Loaded	44 Pallets/Container 1584 Pieces/Container

*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TG-HDN-**445-450**

Double Glass

Mono crystalline series module. Select the best quality N-type mono crystalline cell and production process. Professional technology and reliable quality. Provide excellent guarantee for the system power generation.

Weight 16kg

Qualification and Certification

IEC 61215, IEC 61730, CE, CQC,
ISO 9001: 2015, ISO 14001: 2015,
BS OHSAS 18001:2018

TIGERSOLAR

EFFICIENT POWER GENERATION

PURSUIT OF EXCELLENCE

N-TOPCON Ultra-thin Glass

1.1mm

The world's first breakthrough 1.1mm thick double glass module with superior impact resistance.

Easy installation

The whole module is at least 35% lighter than the regular double glass module in the market. Light and easy to install.

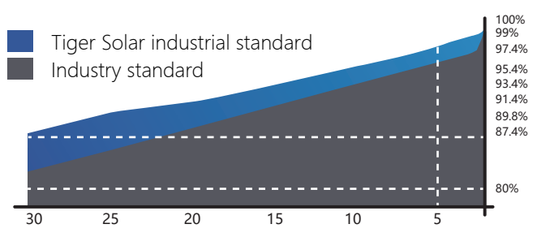
Fast heat-dissipation

Good heat dissipation, 50% better heat dissipation with back glass. More continuous and stable power generation.

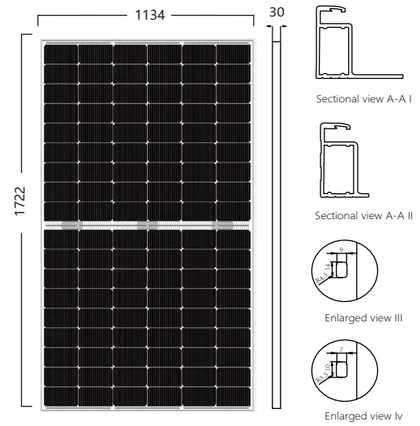
Highly fire-resistant

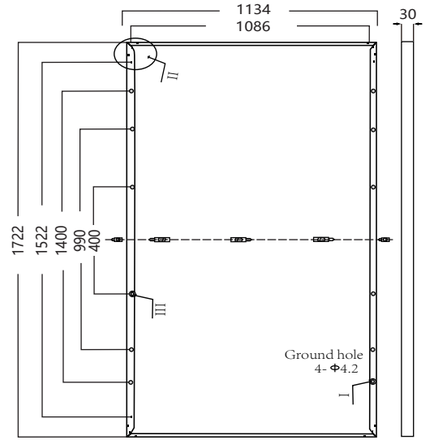
Good fire prevention. Overall module fire prevention up to the highest Class A level.

15 years Product Warranty
30 years Linear Power Warranty

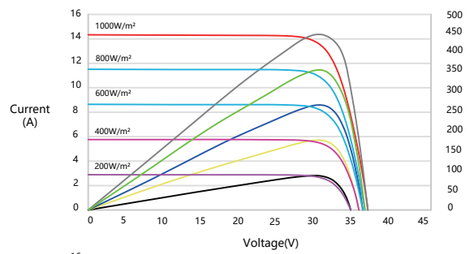


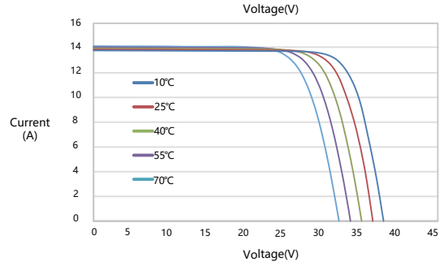
MODULE SIZE





I-V CURVE





ELECTRICAL PERFORMANCE PARAMETERS UNDER STANDARD TEST CONDITIONS(STC)

Power output	445Wp	450Wp
Voltage at Pmax	31.77V	31.87V
Current at Pmax	14.01A	14.12A
Open-circuit voltage	38.64V	38.81V
Short-circuit current	14.29A	14.33A
Module Efficiency(%)	22.79%	23.04%
Operating temperature range	-40℃~+85℃	
Max. system voltage	1000/1500VDC (IEC)	
Max. series fuse rating	25A	
Power tolerance	0~+5%	
Temperature coefficient of Pmax	-0.29%/℃	
Temperature coefficient of Voc	-0.25%/℃	
emperature coefficient of Isc	0.045%/℃	
Nominal operating cell temperature	45±2℃	

STC: irradiance 1000W/m², module temperature 25ºC, air quality AM=1.5, according to EN 60904-3.
Nominal operating temperature: under the condition of irradiance 800W/m², environment temperature 20ºC, wind speed 1m/s, the operating temperature of the module is in the open circuit state.

STRUCTURAL PARAMETERS

Cell Type	MONO Crystalline Cell
Cell orientation	108 (2*54)
Dimensions	1722*1134*30mm
Weight	16KG
Frame	Anodized Aluminium Alloy
J-Box	Protection Class IP68
Output Cables	TüV1×4.0mm², Cable Length: (+): 300mm, (-): 300mm; Or Customerized

*Because the continuous innovation, research and product upgrades, the contents of this product specification are allowed to change without prior notice. These contents may contain some deviation, and are not guaranteed.

This data is not specific to one module, nor is part of the sale activities, but is used to compare different models of module.

Regarding technical changes and specific explanations of test conditions, our company reserves the right of final interpretation.

PACKAGE STANDARD

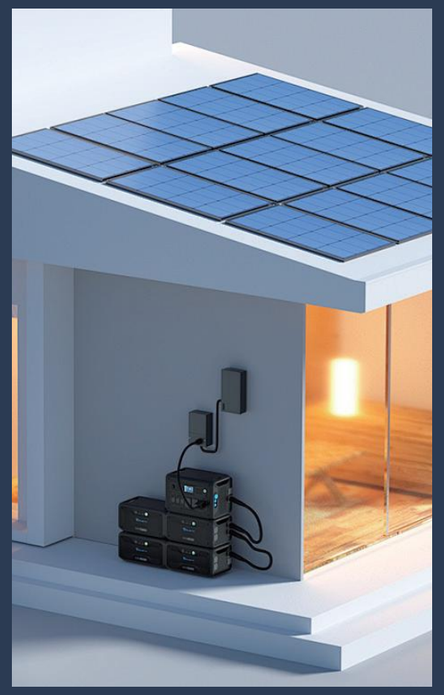
Container	40 HQ	
Size Per Pallet (mm)	1758*1110*1280	
Module Per Package	36 Pieces/Pallet	
Quantity Loaded	26 Pallets/Container	936 Pieces/Container

*The final data of packaging is subject to logistic company.
Above data is just for reference.

Warning: Please read the module installation instruction carefully before handling, installing and operating.

TIGERSOLAR

BRAND GUARANTEE



Safer, Durable and
More Reassuring

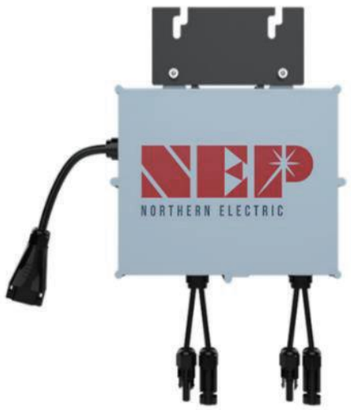
TIGER INVERTER

▶▶▶

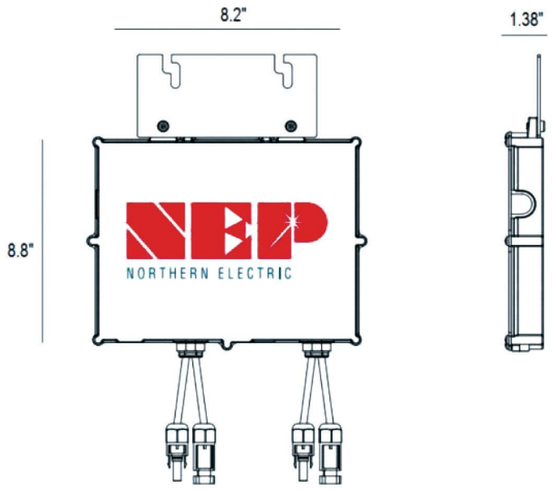
PRODUCT DATASHEET

BDM-800 MICROINVERTER

(NC0136-US-T)



STANDARD DIMENSIONS



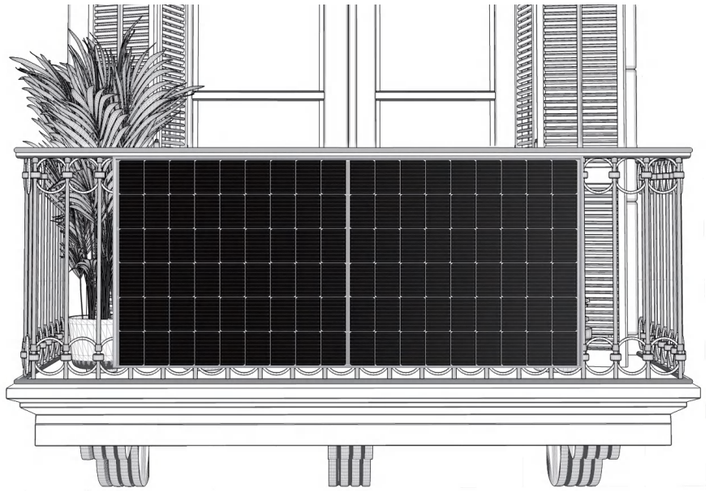
Weight: 6.4 lbs. (2.9 kg)

Product Safety Compliance

UL 1741-SA, UL 1741-SB, CSA C22.2, NO 107.1, IEC/EN 62109-1, IEC/EN 62109-2

Grid Code Compliance (Refer to the label for detailed information)

IEEE 1547, VDE-AR-N 4105*, VDE V 0126-1-1/A1, G83/2, CEI 21, AS 4777.2, AS 4777.3, EN50438, ABNT NBR 16149/16150



NORTHERN ELECTRIC

SPECIFICATIONS

Input (DC)	
Recommended Max PV Power:	650 W x 2
Max DC Open Circuit Voltage:	60 Vdc
Max DC Input Current:	15.2 A
MPPT Tracking Accuracy:	> 99.5%
MPPT Tracking Range:	22 – 55 Vdc
ISC PV (Absolute Maximum):	20 x 2 A
Maximum Backfeed Current to Array:	0 A

Output (AC)		
Peak AC Output Power:	800 W	
Max Continuous Output Power:	768 W	3φ: 700 W
Nominal Power Grid Voltage:	240 Vac	3φ: 208 Vac
Allowable Power Grid Voltage:	211-264 Vac	3φ: 183-228 Vac
Rated Output Current:	3.2A	3φ: 3.36 A
Maximum Units Per Branch 12AWG (20A):	5 units	3φ: 2 units/phase
Maximum Units Per Branch 10AWG (30A):	7 units	3φ: 4 units/phase
(All NEC adjustment factors considered)		
Allowable Power Grid Frequency:	59.3 - 60.5 Hz	
THD:	< 3% (at rated power)	
Power Factor (cos phi, fixed):	-0.99 > 0.9 (adjustable) (0.9un ~0.9ov)	
Current (inrush) (Peak and Duration):	9.4 A, 15 us	
Nominal Frequency:	60 Hz	
Max Output Fault Current:	9.6 A Peak	
Max Output Overcurrent Protection:	20A	

System Efficiency	
Weighted Average Efficiency (CEC):	96.5%
Nighttime Tare Loss:	0.11 W

Protection Function	
Over/Under Voltage Protection:	Yes
Over/Under Frequency Protection:	Yes
Anti-Islanding Protection:	Yes
Over Current Protection:	Yes
Reverse DC Polarity Protection:	Yes
Overload Protection:	Yes
Protection Degree:	NEMA-6 / IP-66 / IP-67
Ambient Temperature:	-40°F to +149°F (-40°C to +65°C)
Operating Temperature:	-40°F to +185°F (-40°C to +85°C)
Display:	LED Light
Communications:	Powerline Communications
Environment Category:	Indoor and outdoor
Wet Location:	Suitable
Pollution Degree:	PD 3
Over Voltage Category:	II(PV), III (AC MAINS)

All NEC required adjustment factors have been considered for AC outputs. AC current outputs will not exceed stated values for Rated output AC Current.

COMPLIANCE

- NEC 2023 Section 690.11 DC Arc-Fault Circuit Protection
- NEC 2023 Section 690.12 Rapid Shutdown of PV Systems on Buildings
- NEC 2023 Section 690.33 Mating Connectors
- NEC 2023 Section 705.12 Point of Connection (AC Arc-Fault Protection)

MIN 7000~10000 TL-X2

- Maximum efficiency 98.1%
- 3 MPP trackers
- Type II SPD on DC side
- Supports export control
- String current up to 16A

GROWATT

POWER-ING TOMO-RROW

Datasheet	MIN 7000TL-X2	MIN 8000TL-X2	MIN 9000TL-X2	MIN 10000TL-X2
Input data (DC)				
Max. recommended PV power (for module STC)	12000W	12000W	13500W	15000W
Max. DC voltage	600V			
Start voltage	80V			
Nominal voltage	360V			
MPP voltage range	60-550V			
No. of MPP trackers	3			
No. of PV strings per MPP tracker	1/1/1			
Max. input current per MPP tracker	16A			
Max. short-circuit current per MPP tracker	24A			
Output data (AC)				
AC nominal power	7000W	8000W	9000W	10000W
Max. AC apparent power	7000VA	8000VA	9000VA	10000VA
Nominal AC voltage(range*)	220V/160~300V			
AC grid frequency(range*)	50/60Hz(44-55Hz/54-65Hz)			
Max. output current	33.5A	38.3A	43A	45.5A
Adjustable power factor	0.8leading...0.8lagging			
THDi	<3%			
AC grid connection type	Single phase			
Efficiency				
Max.efficiency	98.1%			
European efficiency	97.5%			
MPPT efficiency	99.5%			
Protection devices				
DC reverse polarity protection	Yes			
DC switch	Yes			
DC surge protection	Type II			
Insulation resistance monitoring	Yes			
AC short-circuit protection	Yes			
Ground fault monitoring	Yes			
Grid monitoring	Yes			
Anti-islanding protection	Yes			
Residual-current monitoring unit	Yes			
AFCI protection	Optional			
General data				
Dimensions (W / H / D)	425/387/180mm			
Weight	20kg			
Operating temperature range	-30 °C ... +60 °C			
Nighttime power consumption	< 1W			
Topology	Transformerless			
Cooling	Natural convection			
Protection degree	IP66			
Relative humidity	0-100%			
Altitude	4000m			
DC connection	H4/MC4(Optional)			
AC connection	Cable gland +OT terminal			
Display	OLED+LED			
Interfaces: RS485 / USB/Wi-Fi/ GPRS/ RF/LAN	Yes/Yes/Optional/Optional/Optional /Optional			
Warranty: 5 years / 10 years	Yes/Optional			
IEEE1547,UL1741, Inmetro, G99,EN50549-1,UNE217001, UNE206007, PO12.2				

* The AC voltage and frequency range may vary depending on specific country grid standard.
All specifications are subject to change without notice.

MOD 10~15KTL3-X

- Max. efficiency 98.6%
- OLED and Touch button
- Type II SPD on DC and AC side
- String Monitoring
- AFCI optional

GROWATT

POWER-ING TOMORROW

Datasheet	MOD 10KTL3-X	MOD 11KTL3-X	MOD 12KTL3-X	MOD 13KTL3-X	MOD 15KTL3-X
Input data (DC)					
Max. recommended PV power (for module STC)	15000W	16500W	18000W	19500W	22500W
Max. DC voltage	1100V				
Start voltage	160V				
Nominal voltage	580V				
MPPT voltage range	140V-1000V				
No. of MPP trackers	2				
No. of PV strings per MPP tracker	1	1	1/2	1/2	1/2
Max. input current per MPP tracker	13A	13A	13/26A	13/26A	13/26A
Max. short-circuit current per MPP tracker	16A	16A	16/32A	16/32A	16/32A
Output data (AC)					
AC nominal power	10000W	11000W	12000W	13000W	15000W
Max. AC apparent power	11000VA*	12100VA	13200VA	14300VA	16500VA
Nominal AC voltage（range*）	220V/380V, 230V/400V（340-440V）				
AC grid frequency（range*）	50/60 Hz (45-55Hz/55-65 Hz)				
Max. output current	16.7A	18.3A	20A	21.7A	25A
Adjustable power factor	0.8leading…0.8lagging				
THDi	<3%				
AC grid connection type	3W+N+PE				
Efficiency					
MAX. efficiency	98.6%				
European efficiency	98.1%	98.1%	98.2%	98.2%	98.2%
MPPT efficiency	99.9%				
Protection devices					
DC reverse polarity protection	Yes				
DC Switch	Yes				
AC/DC surge protection	Type II / Type II				
Insulation resistance monitoring	Yes				
AC short-circuit protection	Yes				
Ground fault monitoring	Yes				
Grid monitoring	Yes				
Anti-islanding protection	Yes				
Residual-current monitoring unit	Yes				
String fault monitoring	Yes				
AFCI protection	Optional				
General data					
Dimensions (W / H / D)	425/387/178mm				
Weight	14kg	14kg	16kg	16kg	16kg
Operating temperature range	- 25℃ ... +60℃				
Nighttime power consumption	< 1W				
Topology	Transformerless				
Cooling	Natural convection				
Protection degree	IP66				
Relative humidity	0~100%				
Altitude	4000m				
DC connection	H4/MC4(Optional)				
AC connection	Connector				
Display	OLED+LED/WIFI+APP				
Interfaces: USB/RS485/WIFI /GPRS//LAN/RF	yes/yes/Optional/Optional/Optional/Optional				
Warranty: 5 / 10 years	Yes/Optional				
CE, VDE0126, Greece, EN50549, C10/C11, UTE C 15-712, IEC62116, IEC61727, IEC 60068, IEC 61683, CEI0-21, N4105, TOR Erzeuger G98/G99, G100, AS4777, UNE217001, UNE206007, PO12.2					

* For Belgium C10/C11, MOD 10KTL3-X max. output power is limit to 10000VA.
* The AC voltage range and frequency range may vary depending on specific country grid standard.
All specifications are subject to change without notice.

SG8.0/9.0/10RS

Suitable for 50Hz / 60Hz grid, could be used in Asia, Africa,South America, Australia and Europe. Available for hand installation, no need for lifting machinery assistance

HIGH YIELD

- Compatible with high power PV modules and bifacial modules
- Lower startup & wider MPPT voltage range
- Built-in smart PID Zero function

SAFE AND RELIABLE

- Integrated arc fault circuit interrupter
- Built-in Type II DC&AC SPD
- Corrosion protection rating at C5

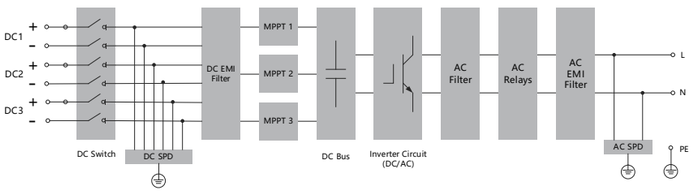
USER FRIENDLY SETUP

- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design

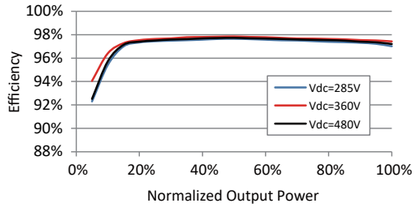
SMART MANAGEMENT

- Real time data (10 seconds refresh sample)
- 24/7 live online monitoring and with integrated display
- Online IV curve scan and diagnosis

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG10RS)



SUNGROW
Clean power for all

Type designation	SG8.0RS	SG9.0RS	SG10RS
Input (DC)			
Recommended max. PV input power	12 kWp	13.5 kWp	15 kWp
Max. PV input voltage		600 V	
Min. operating PV voltage / Start-up input voltage		40 V / 50 V	
Rated PV input voltage		360 V	
MPP voltage range		40 V - 560 V	
No. of independent MPP inputs		3	
Default No. of PV strings per MPPT		1	
Max. PV input current		48 A (16 A / 16 A / 16 A)	
Max. DC short-circuit current		60 A (20 A / 20 A / 20 A)	
Output (AC)			
Rated AC output power	8000 W	9000 W	10000 W
Max. AC Output power	8000 VA	9000 VA	10000 VA
Rated AC output current (at 230 V)	34.8 A	39.2 A	43.5 A
Max. AC output current	36.4 A	41 A	45.5 A
Rated AC voltage		220 V / 230 V / 240 V	
AC voltage range		154 V - 276 V	
Rated grid frequency / Grid frequency range		50 Hz / 45 - 55 Hz 60 Hz / 55 - 65 Hz	
Harmonic (THD)		< 3 % (at rated power)	
Power factor at rated power / Adjustable power factor		> 0.99 / 0.8 leading - 0.8 lagging	
Feed-in phases / Connection phases		1 / 1	
Efficiency			
Max. efficiency / European efficiency	97.8 % / 97.3 %	97.8 % / 97.4 %	97.8 % / 97.4 %
Protection			
Grid monitoring		Yes	
DC reverse polarity protection		Yes	
AC short-circuit protection		Yes	
Leakage current protection		Yes	
Surge Protection		DC type II / AC type II	
DC switch		Yes	
PV string current monitoring		Yes	
Arc fault circuit interrupter (AFCI)		Yes	
PID Zero function		Yes	
General Data			
Dimensions (W * H * D)		490 mm * 340 mm * 170 mm	
Weight		19 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
Operating ambient temperature range		-25 - to 60 -	
Allowable relative humidity range (non-condensing)		0 % - 100 %	
Cooling method		Natural cooling	
Max. operating altitude		4000 m	
Display		LED digital display & LED indicator	
Communication		Ethernet / WLAN / RS485 / DI (Ripple control & DRM)	
DC connection type		MC4 (Max. 6 mm²)	
AC connection type		Plug and play connector (Max. 16 mm²)	
Grid compliance		IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, AS/NZS 4777.2, ABNT NBR 16149, ABNT NBR 16150, G99	
Grid Support		Active & reactive power control and power ramp rate control	

Sungrow | 320KW String Inverter

SG320HX

Multi-MPPT String Inverter for 1500 Vdc System

NEW

HIGH YIELD

- Up to 16 MPPT with 99% efficiency
- 40A MPPT compatible with 500Wp+ module
- DC 2 in 1 connection

LOW COST

- Compatible with Al and Cu AC cables
- Less than 30ms reactive power response
- PLC communication to save the cable cost

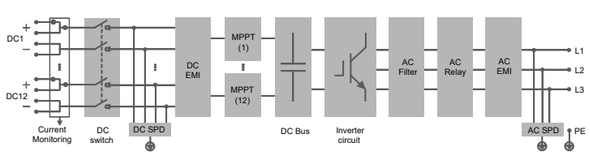
SMART O&M

- Touch free commissioning and remote firmware upgrade
- Smart string detection and IV scanning
- Fuse free design with smart string current monitoring

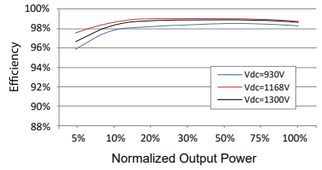
PROVEN SAFETY

- IP66 protection and C5 anti-corrosion grade
- Type II SPD for both DC and AC

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG320HX
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	500 V / 550 V
Nominal PV input voltage	1080 V
MPP voltage range	500 V – 1500 V
No. of independent MPP inputs	12 (optional: 16)
Max. number of PV strings per MPPT	2
Max. PV input current per MPPT	40 A (Optional: 30A for 16 MPPT inputs)
Max. DC short-circuit current per MPPT	60 A
Output (AC)	
AC output power	352 kVA @ 30℃ / 320 kVA @ 40℃ / 295 kVA @ 50℃
Max. AC output current	254 A
Nominal AC voltage	3 / PE, 800 V
AC voltage range	640 – 920V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 57 – 63 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3
Efficiency	
Max. efficiency / European efficiency	99.02 % / 98.8 %
Protection	
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch / AC switch	Yes / No
PV string current monitoring	Yes
Q at night function	Yes
Anti-PID and PID recovery function	Optional
Surge protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	1136 * 870 * 361 mm
Weight	≤116 kg
Isolation method	Transformerless
Degree of protection	IP66
Power consumption at night	< 6 W
Operating ambient temperature range	-30 to 60 ℃
Allowable relative humidity range	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / PLC
DC connection type	MC4-Evo2 (Max. 6 mm², optional 10 mm²)
AC connection type	Support OT/DT terminal (Max. 400 mm²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, EN 50549-1/2, UNE 206007-1:2013, UTE C15-712-1:2013
Grid Support	Q at night function, LVRT, HVRT,active & reactive power control and power ramp rate control

320kW String PV Inverter

Product features

Efficient

Maximum efficiency 99%, China efficiency 98.6%
12/14/16-channel MPPT suitable for all types of application scenes The maximum current of single cluster is 20A, supporting 182/210 components
Integrated PID protection and repair to improve system power generation

Cost-saving

night SVG reduces the SVG investment of the power plant
Support the cluster with two to one access, saving DC cable cost
Support aluminum wire access, saving AC cable cost Support PLC carrier communication, reducing communication and construction cost

Intelligent

Cluster current detection and IV curve scanning ensure maintenance easier
Power factor ±0.8 adjustable, full load power 0.9 or more, support night SVG function
AC/DC redundant power supply provides 24-hour status monitoring

Reliable

IP66 protection level with standard secondary lightning protection
45℃ full load operation without derating, and high configuration without light loss
DC arc detection and intelligent DC switch to cut off the fire hazard from the source

Technical Parameter

Product model	tPower-NM6-320K
DC-side parameters	
Max. open circuit voltage	1500VDC
Rated input voltage	1080V
Start Voltage	500V
MPPT voltage range	500V~1500V
Full load MPPT voltage range	850V~1300V
Number of MPPT	12 (optional 14/16 channel)
Maximum number of input strings per MPPT	2
Max. input current	12*60 A(optional 14*60 A/16*60 A)

Technical Parameter

Product model	tPower-NM6-320k
AC-side parameters	
Rated output power	320kW
Maximum Output Power:	352kW
Max. output apparent power	352KVA
Maximum Output Current	254 A
Rated power grid voltage	3 / PE, 800 V
Voltage range of power net （power grid）	680-880 V
Rated output frequency	50Hz/60 Hz
Power factor	＞0.99
Power factor adjustment range	±0.8
Overall current waveform distortion ratio	＜3%
System parameters	
Maximum efficiency	99%
China efficiency	98.6%
Island protection	Equipped
Surge protection	DC secondary/AC secondary
reverse DC protection	Equipped
DC input switch	Equipped
AC overcurrent protection	Equipped
Low voltage ride through	Equipped
Intelligent string detection	Equipped
DC arc pull detection	Optional
PID protection and repair	Optional
Nighttime reactive power compensation	Optional
Basic parameters	
Dimension (W×D×H)	1120×370×910mm
Weight (with hangers)	115kg
topology	Transformerless
Protection degree	IP66/ C5
Nighttime loss	＜5W
Cooling method	Intelligent air cooling
Maximum working altitude	5000m （＞4000m）
Working environment temperature	-30℃~60℃
Working environment humidity	0~100%
Display	LED，Bluetooth+APP
Communication	RS485/PLC (optional)
DC side terminal	MC4 terminal
AC side terminal	OT terminal (max. 240mm²,support aluminum wire access)
Grid Connection Standard	NB/T 32004-2018，GB/T 37408-2019
Safety/EMC standards	IEC 62109-1/-2，IEC 61000-6-2/-4，NB/T 32004-2018，GB/T 37408-2019

TIGERSOLAR

MULTIPLE PROTECTIONS

Each Protection Ensures
Peace of Mind

TIGER BRACKET

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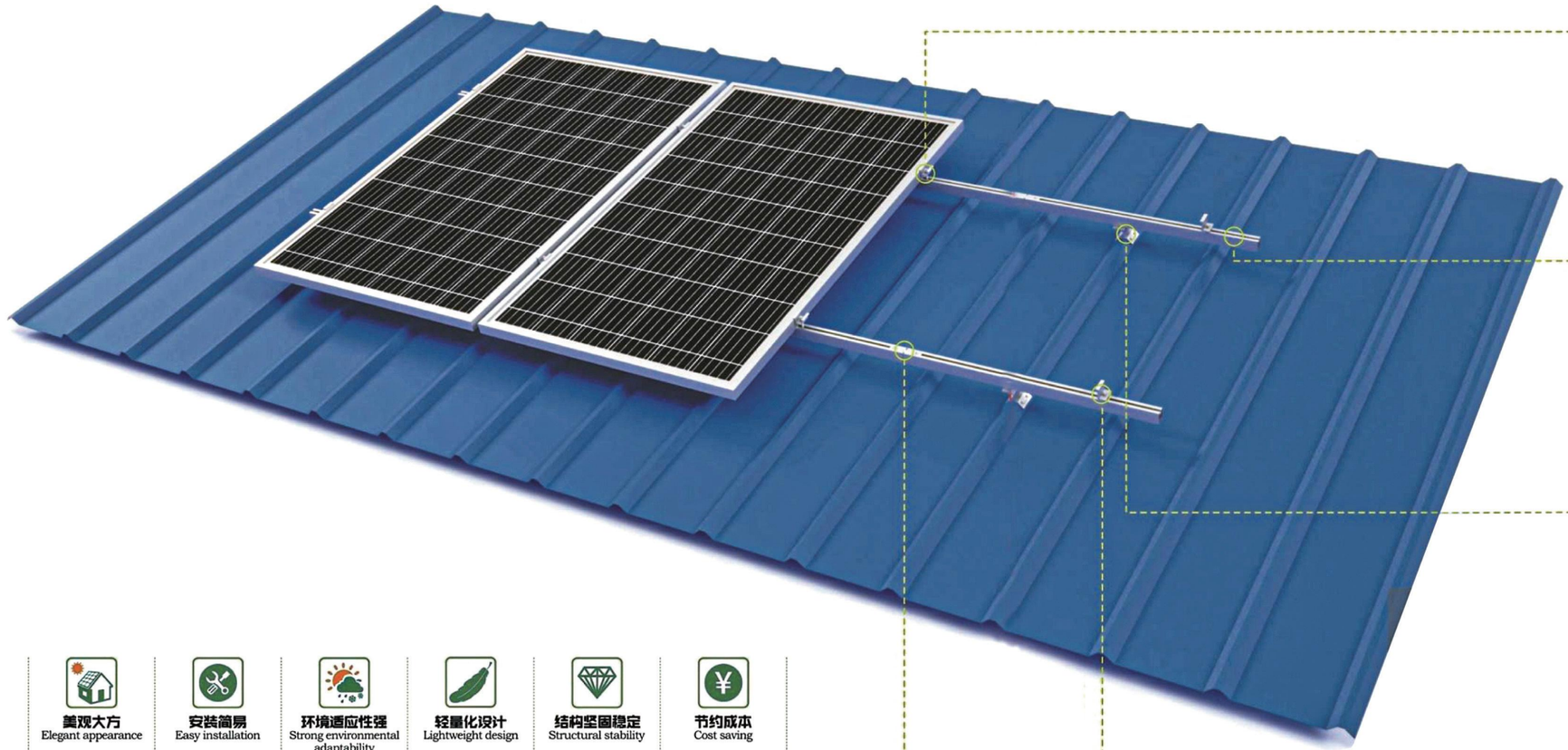
Rooftop Solution | Color Steel Tile Roof Solution



中压块
Mid clamp

H型轨道
H rail

梯形瓦夹具
Trapezoidal tile fixtrue

侧压块
End clamp

导轨连接件
Rail Splice

美观大方 Elegant appearance

安装简易 Easy installation

环境适应性强 Strong environmental adaptability

轻量化设计 Lightweight design

结构坚固稳定 Structural stability

节约成本 Cost saving

技术参数 Technical parameters

技术项目	参数
安装地点 installation location	彩钢瓦屋面 Coloured steel tile rooftop
安装角度 Installation Angle	与屋面平行 Parallel to the roof
风荷载 Wind load	42m/s
雪荷载 Snow load	1.4KN/m ²
电池板排列形式 Panels arrangement	横向或纵向 Horizontal or vertical
设计标准 Design Standard	AS/NZS1170,DIN1055,JIS C 8955:2011
型材材质 Profile material	AL6005-T5/AL6063-T5(本色阳极氧化 Anodized)
紧固件材质 Fastener material	304不锈钢 SUS304
配件材质 Accessories material	AL6005-T5/AL6063-T5(本色阳极氧化 Anodized 铝合金 Aluminium alloy)
质保 Quality assurance	10年 10years

Rooftop Solution | Color Steel Tile Roof Solution

中压块
Mid clamp

铝合金导轨
Aluminium Rail

L-脚
L-foot

侧压块
End clamp

美观大方
Elegant appearance

安装简易
Easy installation

环境适应性强
Strong environmental adaptability

轻量化设计
Lightweight design

结构坚固稳定
Structural stability

节约成本
Cost saving

技术参数 Technical parameters

技术项目	参数
安装地点 installation location	彩钢瓦屋面 Coloured steel tile rooftop
安装角度 Installation Angle	与屋面平行 Parallel to the roof
风荷载 Wind load	42m/s
雪荷载 Snow load	1.4KN/m ²
电池板排列形式 Panels arrangement	横向或纵向 Horizontal or vertical
设计标准 Design Standard	AS/NZS1170,DIN1055,JIS C 8955:2011
型材材质 Profile material	AL6005-T5/AL6063-T5(本色阳极氧化 Anodized)
紧固件材质 Fastener material	304不锈钢 SUS304
配件材质 Accessories material	AL6005-T5/AL6063-T5(本色阳极氧化 Anodized 铝合金 Aluminium alloy)
质保 Quality assurance	10年 10years

主要组件 Components

铝合金导轨
Aluminium Rail
型号 Model：AQG-008

侧压块
End Clamp
型号 Model：AQG-009

导轨连接件
Rail Splice
型号 Model：AQG-010

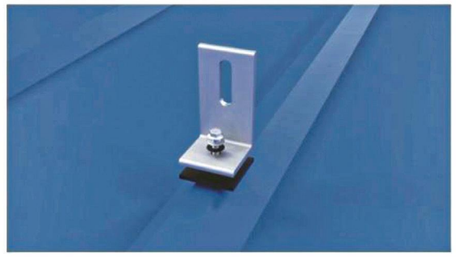
中压块
Mid clamp
型号 Model：AQG-011

L-脚
L-foot
型号 Model：AQG-012

L-脚
L-foot
型号 Model：AQG-013

自攻螺丝
Self tapping screw
型号 Model：AQG-014

安装步骤 Mounting steps



1 根据图纸，用自攻螺丝将L脚与屋面固定
According to the scheme drawing, fix the L-foot on roof with tapping screw.

2 用同样的方法安装其他夹具
Fix the other L-foot in the same way.

3 将导轨安装在L脚上，并用梯形螺母固定
Install the rail on theL-foot and fix with trapezoidal nut.

4 用导轨连接件将导轨连接
Connect the rails with rail splice.

5 按照同样的方法安装其它导轨
Mount the other rails in the same way.

6 安装组件，用侧压将组件与导轨固定。
Solar panel mounting, fix the panel on rail with end clamp.

7 安装组件，用中压将组件与导轨固定
Solar panel mounting, fix the panel on rail with mid clamp.

8 安装完成
Mounting complete

主要组件 Components

梯形瓦夹具
Trapezoidal tile fixture
型号 :AQC-001

直立锁边夹具
Vertical lock edge fixture
型号 :AQC-002

圆形夹具
Circular fixture
型号 :AQC-003

角弛夹具
Angle fixture
型号 :AQC-004

直立锁边夹具
Vertical lock edge fixture
型号 :AQC-005

角弛夹具
Angle fixture
型号 :AQC-006

H型轨道
H-rail
型号 :AQC-007

中压块
Mid clamp
型号 :AQC-008

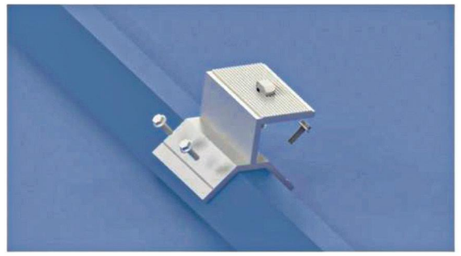
侧压块
End clamp
型号 :AQC-009

梯形螺母套装
Trapezoidal nut kit
型号 :AQC-010

T型螺栓
T-Bolt
型号 :AQC-011

导轨连接件
Rail Splice
型号 :AQC-012

安装步骤 Mounting steps



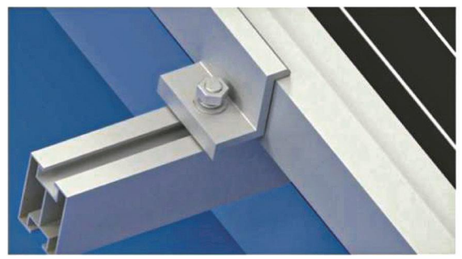
1 根据图纸，用自攻螺丝将梯形瓦具与屋面固定
According to the scheme drawing, fix the trapezoidal tile fixture on roof with tapping screw.

2 用同样的方法安装其它夹具
Fix the other trapezoidal tile fixture in the same way.

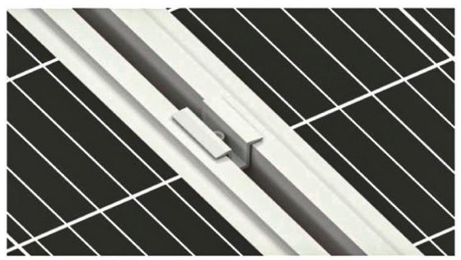
3 将导轨安装在夹具上，并用T型螺丝固定。
Install the rail on the fixture and fix with T-screw.

4 用导轨连接件将导轨连接
Connect the rails with rail splice.

5 按照同样的方法安装其它导轨
Mount the other rails in the same way.



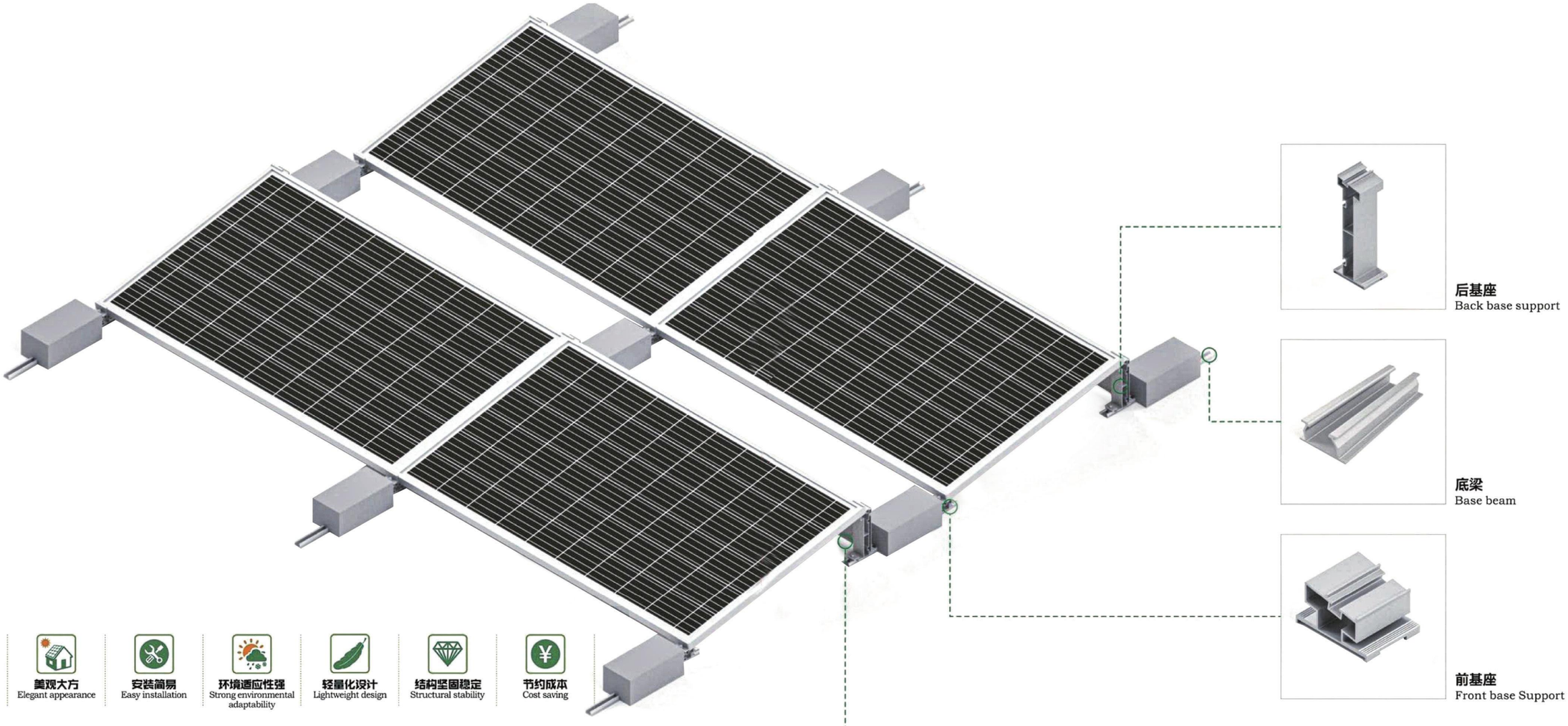
6 安装组件，用侧压将组件与导轨固定。
Solar panel mounting, fix the panel on rail with end clamp.



7 安装组件，用中压将组件与导轨固定
Solar panel mounting, fix the panel on rail with mid clamp.

8 安装完成
Mounting complete

Rooftop Solution | Terrace Roof Lightweight Solution



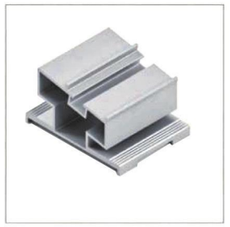
技术参数 Technical parameters

技术项目	参数
安装地点 installation location	水泥平顶屋 Concrete flat rooftop
安装角度 Installation Angle	0–45°
风荷载 Wind load	42m/s
雪荷载 Snow load	1.4KN/m²
电池板排列形式 Panels arrangement	横向或纵向 Horizontal or vertical
设计标准 Design Standard	AS/NZS1170,DIN1055,JIS C 8955:2011
型材材质 Profile material	AL6005–T5/AL6063–T5(本色阳极氧化 Anodized)
紧固件材质 Fastener material	304不锈钢 SUS304
配件材质 Accessories material	AL6005–T5/AL6063–T5(本色阳极氧化 Anodized 铝合金 Aluminium alloy)
质保 Quality assurance	10年 10years

主要组件 Components

后基座
Back base support
型号 Model：**AQL-001**

底梁
Base beam
型号 Model：**AQL-002**



前基座
Front base Support
型号 Model：**AQL-003**

基座压块
Base Support Clamp
型号 Model：**AQL-004**

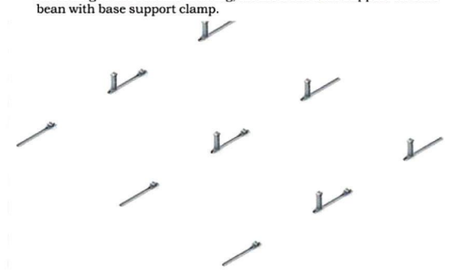
侧压块
End Clamp
型号 Model：**AQL-005**

挡板
Baffle
型号 Model：**AQL-005**

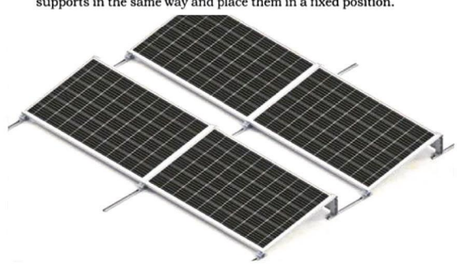
T型螺栓
T-Bolt
型号 Model：**AQL-006**

安装步骤 Installation setps

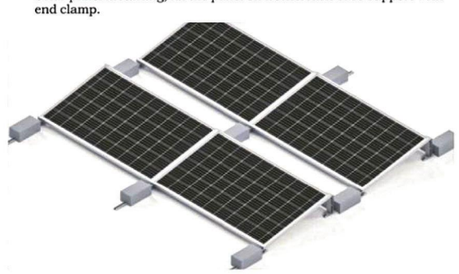
1 根据图纸，用基座压块将前基座与地梁结合
According to the scheme drawing, fix the front base support on base bean with base support clamp.



3 根据图纸，用同样方法安装其他前后基座并放在固定位置
According to the scheme drawing, mount the other front & back base supports in the same way and place them in a fixed position.

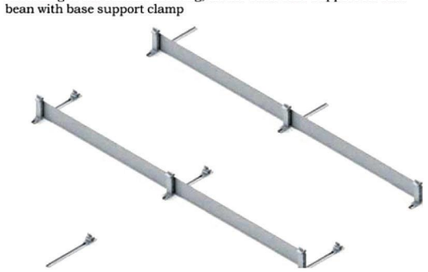


5 安装组件,用测压将组件固定在前后基座上
Solar panel mounting, fix the panel on front&back base support with end clamp.



7 安装完成
Mounting complete

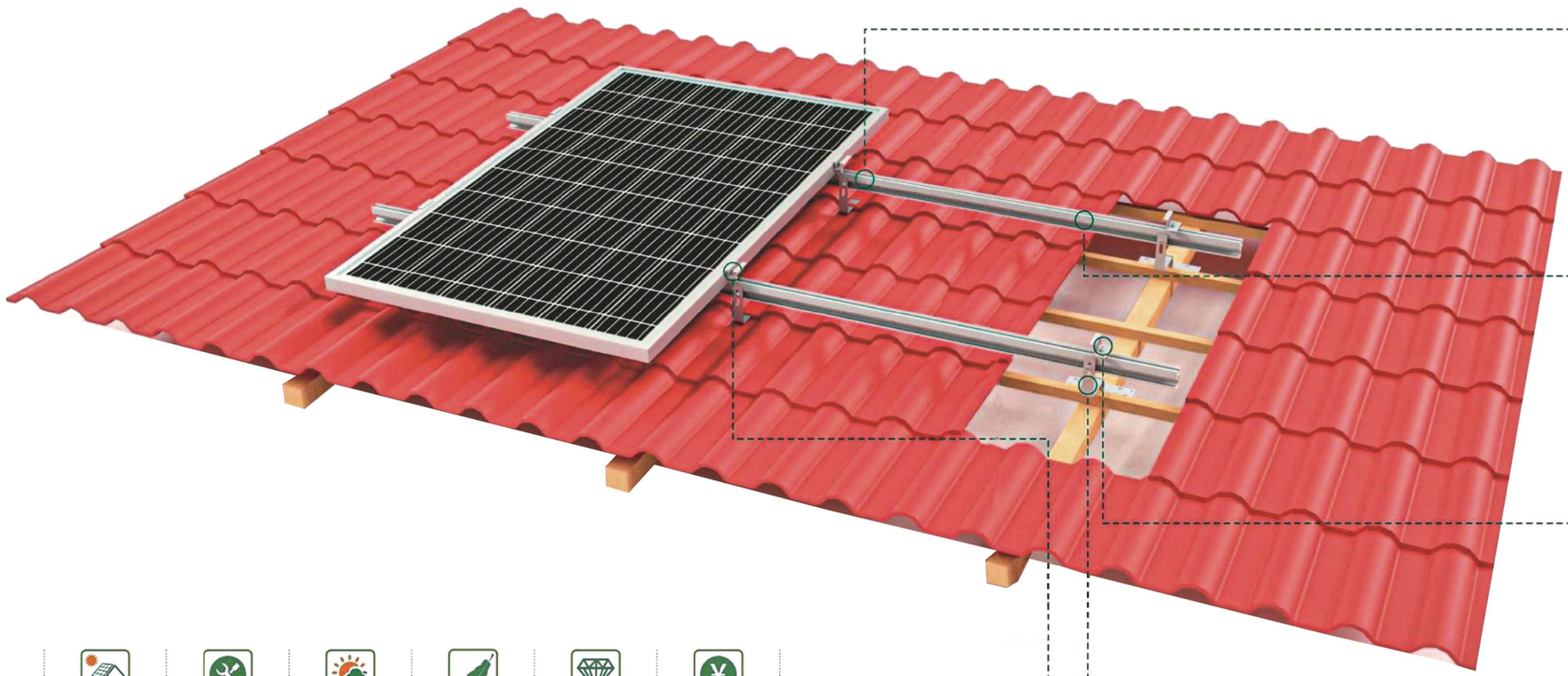
2 根据图纸，用基座压块将后基座与地梁结合
According to the scheme drawing, fix the back base support on base bean with base support clamp



4 将挡风板安装在后基座上
Mount the windscreen on the back base support.

6 组件安装完成并调整好位置后，将水泥墩压在底梁上固定
After the panels are installed and adjusted, fix the cement piers on the bottom beam.

Rooftop Solution | Glazed Tile Roof Solution



导轨连接器
Rail Splice

导轨
Rail

侧压块
End Clamp

可调节挂钩
Adjustable Hook

中压块
Mid Clamp

美观大方 Elegant appearance

安装简易 Easy installation

环境适应性强 Strong environmental adaptability

轻量化设计 Lightweight design

结构坚固稳定 Structural stability

节约成本 Cost saving

技术参数 Technical parameters

技术项目	参数
安装地点 installation location	琉璃瓦或陶瓷瓦 Glazed tile rooftop
安装角度 Installation Angle	与屋面平行 Parallel to the roof
风荷载 Wind load	42m/s
雪荷载 Snow load	1.4KN/m ²
电池板排列形式 Panels arrangement	横向或纵向 Horizontal or vertical
设计标准 Design Standard	AS/NZS1170,DIN1055,JIS C 8955:2011
型材材质 Profile material	AL6005-T5/AL6063-T5(本色阳极氧化 Anodized)
紧固件材质 Fastener material	304不锈钢 SUS304
配件材质 Accessories material	AL6005-T5/AL6063-T5(本色阳极氧化 Anodized 铝合金 Aluminium alloy)
质保 Quality assurance	10年 10years

主要组件 Components

304不锈钢挂钩
SUS304 Hook
型号 Model：**AQG-001**

304不锈钢挂钩
SUS304 Hook
型号 Model：**AQG-002**

304不锈钢挂钩
SUS304 Hook
型号 Model：**AQG-003**

304不锈钢挂钩
SUS304 Hook
型号 Model：**AQG-004**

304不锈钢可调侧挂钩
SUS304 Adjustable Side Hook
型号 Model：**AQG-005**

304不锈钢可调挂钩
SUS304 Adjustable Hook
型号 Model：**AQG-006**

304不锈钢可调直挂钩
SUS304 Adjustable Vertical Hook
型号 Model：**AQG-007**

铝合金导轨
Aluminium Rail
型号 Model：**AQG-008**

侧压块
End Clamp
型号 Model：**AQG-009**

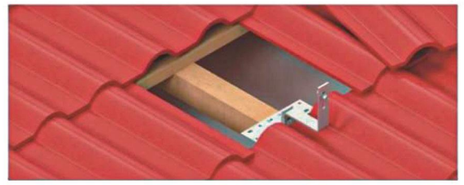
中压块
Mid clamp
型号 Model：**AQG-010**

L型压块
L-Clamp
型号 Model：**AQG-011**

导轨连接件
Rail Splice
型号 Model：**AQG-012**

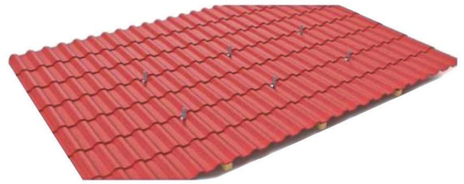
安装步骤 Mounting steps

① **根据方案图，将需要取下的瓦片取下。**
According to the scheme drawing,remove the tile.



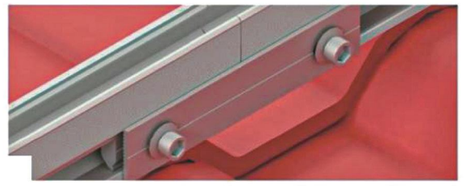
② **将不锈钢挂钩用螺丝固定在木椽上。**
Fix the SUS304 hook on the rafter with screw.

③ **挂钩固定好后，将取下的瓦片复原。**
After the hook is fixed,recover the tile.

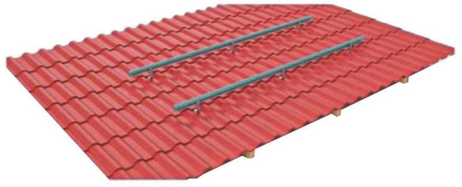


④ **用同样的方法安装其他的挂钩。**
Fix the other hooks in the same way.

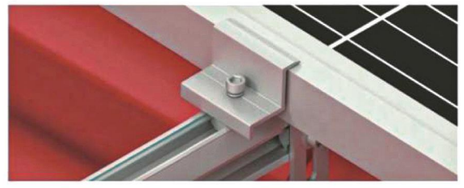
⑤ **根据图纸，将导轨安装在挂钩上，并用梯形螺母固定。**
Accrding to the drawing,install the rail on the hook and fix with the trapezoidal nut.



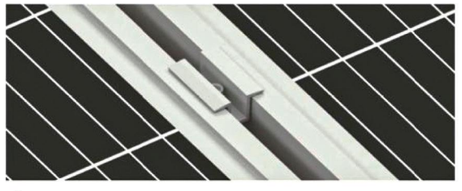
⑥ **用导轨连接件连接导轨。**
Splice the rails with rail splice.



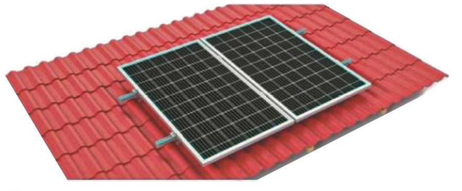
⑦ **按照同样的方法安装其他导轨。**
Mount the other rails in the same way.



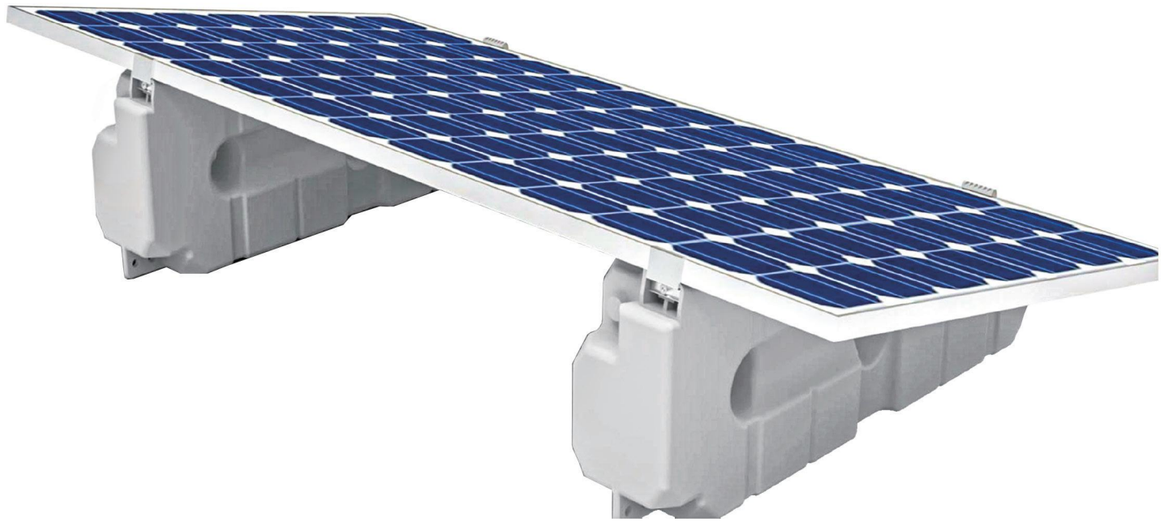
⑧ **将太阳能组件放在导轨上，用侧压使其与支架固定。**
Mount the solar panel on the rail,and fix them with the end clamp.



⑨ **将太阳能组件放在导轨上，用中压使其与支架固定。**
Mount the solar panel on the rail,and fix them with the mid clamp.



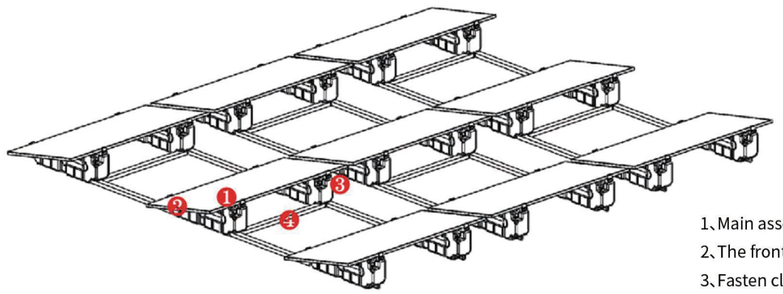
⑩ **安装完成。**
The mounting is complete.



Roof

Type	JUST ROOF-R3
Installation Location	Concrete level roof/Ground
Installation Angle	12°
Module Size	(W:1134mm* L:unlimited)
Loaded Type	Loaded water
Matierals	HDPE High Density Polyethylene +
	Resist UV Anti aging materials
Body Size	1150mm*383mm*220mm
Installation Time	<1 min/ set
Working Temprature	-40°~85°
20-Foot Container Fully Loaded	220 sets
13m Van Truck Packing	460 sets

Module Install	Horizontal
Weight	<10 kg / pcs
Module Type	182/210 Cell module
Maximum Water Load	120KG(60kg/pcs)
Fastener Metiarals	AL6063-T5
VOL	18 pcs/1.2m³
Recoverability	Yes
Wanrranty	Using period for 25 years
	Warranty for 10 years
40-Foot Container Fully Loaded	450 sets
17m Van TruckPacking	900 sets

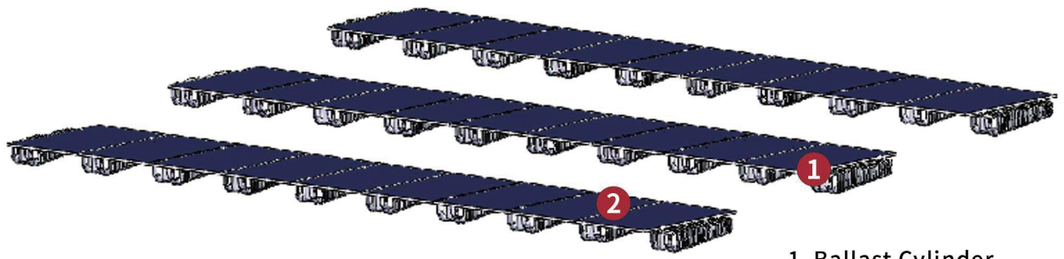


1、Main assembly
2、The front support leg
3、Fasten clamp for PV module
4、Connecting rod (optional)

Roof

Type	JUST ROOF-R4
Installation Location	Concrete level roof/Ground
Installation Angle	5°
Wind Resistance	40m/s (Max. Category 13 Typhoon)
Module Size	(Unrestricted)
Loaded Type	Loaded water
Matierals	HDPE High Density Polyethylene +
	Resist UV Anti aging materials
Body Size	415*300*1470(mm)
Installation Time	<1 Minute/Module
Working Temprature	-40°C to 85°C
20-Foot Container Fully Loaded	160 sets
13m Van Truck Packing	430 sets

Module Install	Vertical Mounting
Weight	<6kg/Unit
Module Type	(Unrestricted)
Maximum Water Load	120kg/Unit
Fastener Metiarals	AL6063-T5
VOL	36 Units/5.85m³
Recoverability	Yes
Wanrranty	Using period for 25 years
	Warranty for 10 years
40-Foot Container Fully Loaded	380 Sets
17m Van TruckPacking	580 Sets



1、Ballast Cylinder
2、Component Fixing Card

Carport | All steel photovoltaic carport system

All steel photovoltaic carport system Type A

Carport structure characteristics

1. New waterproof structural design, with water tank and waterproof rubber strip, effectively solve the problem of water seepage.
2. The design of the frame structure provides strong stability for the overall structure, while reducing the requirements for foundation fabrication and resisting strong winds and heavy snowfall.
3. The whole carport structure is assembled by cold rolled steel, light structure, fast installation and short fabrication time.
4. Low overall maintenance cost and long service life.

Technical Parameters

Module Arrangement	Horizontal or vertical
Applicable Module	With Frame
Wind Load	32m/s(10 mins) or Customized
Snow Payload	0.85kN/M2 or Customized
Parking Space	Single/Double Parking Space
Foundation Type	Concrete Foundation
Waterproof Standard	Roof Structural Waterproof
Installation Angle	5-10°
Bracket Material	Main Structure: Cold Rolled Steel
Color	Silver, white or customized
Standard	AS/NZS1170,DIN1055,HSC89552017, IBC2009,EN1991, Building codeCBc2010
Warranty	10 years

Carport Functionality

Size of the parking space	Width 2.6m; Length 5.3m; Span 5.5m
Parking space/Span	2 pcs
Height from the Upper Surface	3.0m
Door Opening	Barrier Free

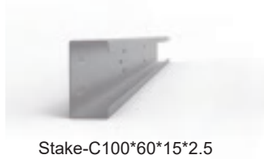
System Component

Base Support

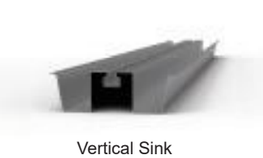
Column Splice 1

Column Splice 2

Support Splice 1



Stake-C100*60*15*2.5
Inclined Support-C100*40*15*2.0
Guide Rail-C160*80*25*2.0
Cross-beam-C160*80*25*2.0



Vertical Sink

Horizontal Sink

Sink Press Clamp

M10 Stick

D25*2.0 Cannula

C Shape Rail Splice

Support

FLAT SINGLE AXIS TRACKING BRACKET SYSTEM

Produet features

Security
Superior control system
Convenient operation and maintenance

Parameters oftracking system

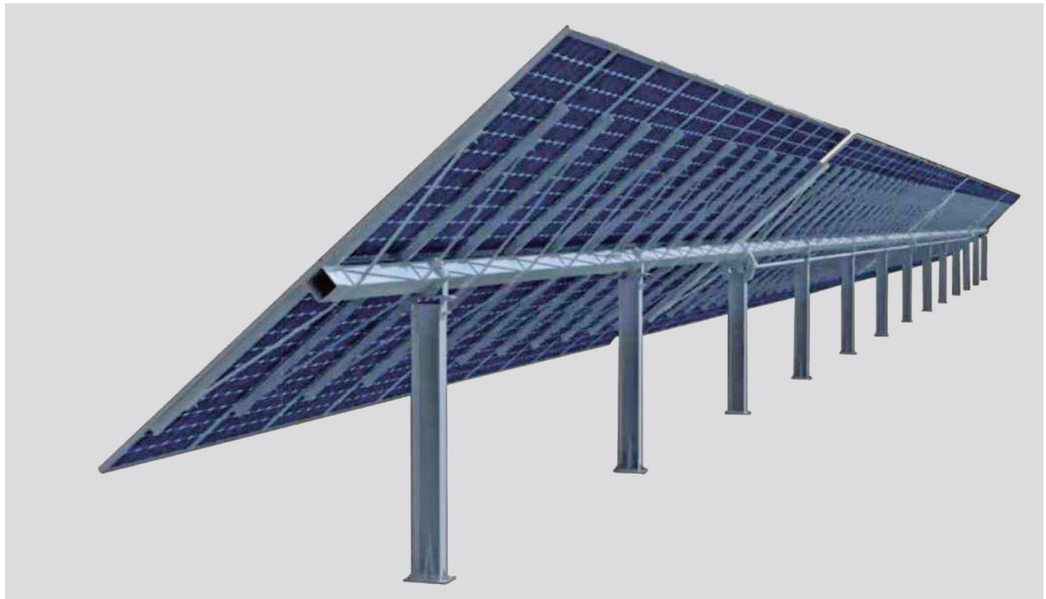
System Installed Capacity	2x60 Pcs
Control Method	Astronomical Time Control + AI Intelligent Algorithm
Tracking Accuracy	±2°
Driving method	Multi-point rotary drive/actuator
Maximum Operating Wind Speed	18m/s
Maximum Safe Wind Speed	45m/s Customized
Working Temperature	-30℃~80℃ Customized
Tracking Angle	±60° Customized
GCR	30%~60% Customized
Product Material	Carbon Steel / Zinc-Aluminum-Magnesium / Pre-Galvanized
Foundation Type	Steel Pile / PHC Pile / Grouted Pile / Independent Foundation
Module Type	Compatible with all modules with frames
Protection Level	Protection Level
Life Span	25 years

Parameters of electrical control

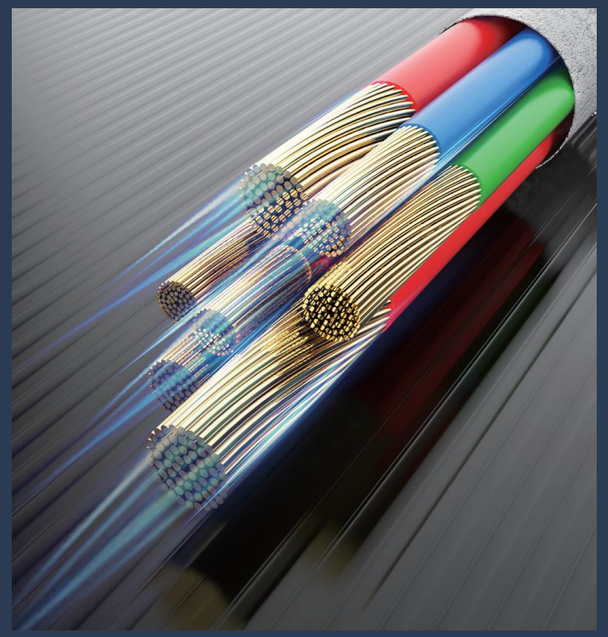
Power Supply	Grid power / component self-powered / string power supply		
Wind Protection			Yes
Communication Function	RS485 Wireless Lora transmission / Wired RS485		
Cleaning Mode	Optional	Heavy Snow Patterns	Optional
System Power Consumption			<0.1KWH(24 hours)
Shadow resurgence			Yes

Warranty

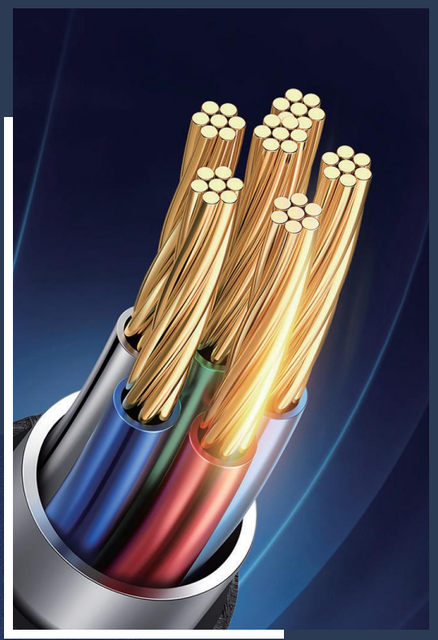
Structural Component	10 Years
Drive and Control Components	5 Years

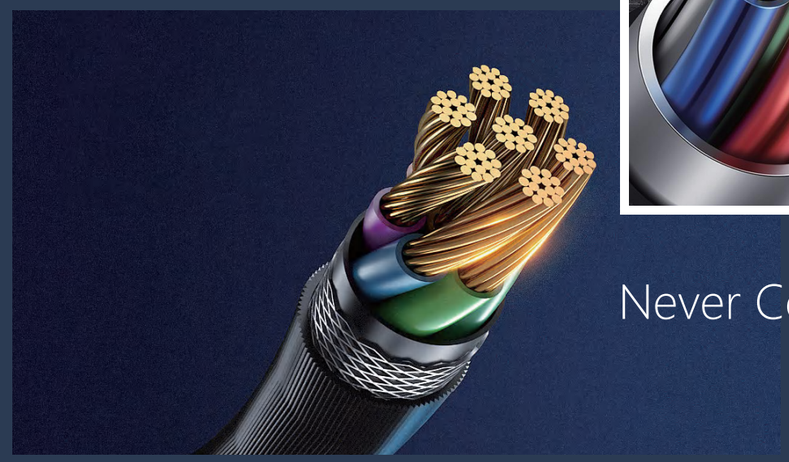


TIGERSOLAR



STRICT STANDARDS





Never Compromise
on Quality

TIGER PHOTOVOLTAIC CABLE

▶▶▶

Photovoltaic Cable

1. Special cable for photovoltaic module connection（PV1-F）

1.1 Model and Specification

Table1 Model and Specification

Model	Specification	Voltage	Standard
PV1-F	1.5mm^2 ~ 35mm^2	AC0.6/1kV,DC1800V	2pfg 1169

1.2 Product Description

According to 2pfg 1169 / 08.2007, this product is applicable to the single core flexible cable (wire) with the maximum allowable DC voltage of 1.8kv and used on the DC side of photovoltaic system. This product is suitable for use under class II safety level.

1.3 Product structure diagram

1.4 Product Features

- Test voltage: AC 6500 V,5min
- Operating temperature(short circuit):250°C
- Short circuit time:5S
- Temperature range : Fixed: -40° C to +90° C
- Bending radius: 4D
- Fire performance: Flame test on single vertical cable
- Cold performance: meet 2pfg1169
- Other: UV resistance, ozone resistance, acid and alkali resistance, heat resistance
- Certification certificate: TÜV

2. Special cable for photovoltaic module connection（H1Z2Z2-K）

2.1 Model and Specification

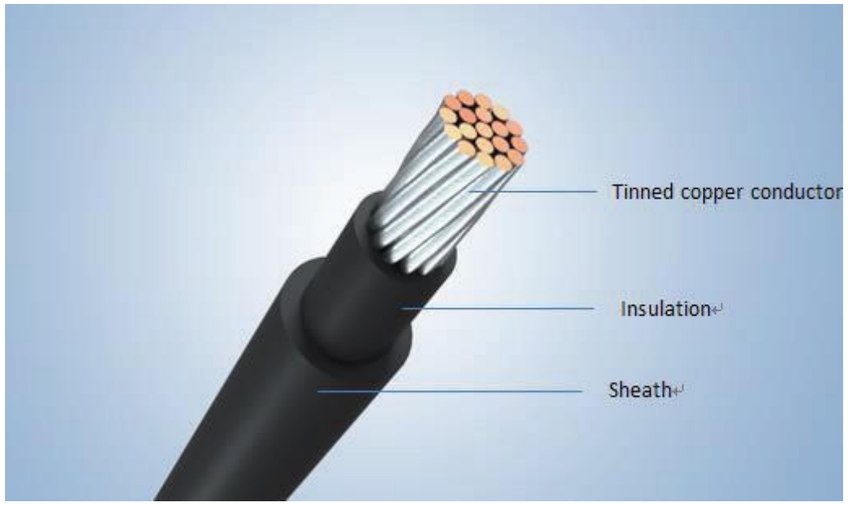
Table1 Model and Specification

Model	Specification	Voltage	Standard
H1Z2Z2-K	1.5mm^2 ~ 240mm^2	AC1.0/1.0 kV,DC1500V	EN 50618:2014

2.2 Product Description

According to EN 50618:2014, this product is applicable to the single core flexible cable (wire) with the maximum allowable DC voltage of 1.5kv and used on the DC side of photovoltaic system. This product is suitable for use under class II safety level.

2.3 Product structure diagram



2.4 Product Features

- Test voltage: AC 6500 V,5min
- Operating temperature(short circuit):250°C
- Short circuit time:5S
- Temperature range : Fixed: -40° C to +90° C
- Bending radius: 4D
- Fire performance: Flame test on single vertical cable
- Cold performance: meet EN 50618:2014
- Other: UV resistance, ozone resistance, acid and alkali resistance, heat resistance
- Certification certificate: TÜV

SPECIFICATION FOR APPROVAL

SUNKEAN

1.CONSTRUCTION

RATED VOLTAGE	62930 IEC131/ H1Z2Z2-K 4mm² DC1500V		REVISION: A/0	FORM NO. B274
			CONSTRUCTION D.W.G	
Conductor	Cross-sectional Area	4mm²		
	Material	Stranded Tinned Copper		
	Conductor.Size (mm)	56/(0.285±0.008)		
	Stranded OD.(mm)	2.4		
Inner Layer	Material	XLPO		
	AVG Thickness (mm)	0.70		
	Min Thickness (mm)	0.53		
	OD.(mm)	3.85±0.10		
	Color	Black		
Outer Layer	Material	XLPO		
	AVG Thickness (mm)	0.80		
	Min Thickness (mm)	0.58		
	OD. (mm)	5.50±0.15		
	Color	Black	INNER AND OUTER LAYER IS INSEPARABLE.	

2.MECHANICAL CHARACTERISTICS

ITEM		SPECIFICATION	
		INNER LAYER	OUTER LAYER
Elongation	Un-aged	≥125%	≥125%
Strength		≥8MPa	≥8MPa
Cold bend test	(-40 ± 2.0°C × 16h)	No cracking	
Flame test	IEC60332-1	PASS	
Rated temperature	–40℃ up to +90℃		
Thermal endurance properties	Elongation≥50% Temperature index≥120		

SPECIFICATION FOR APPROVAL

SUNKEAN

1.CONSTRUCTION

RATED VOLTAGE	62930 IEC131/ H1Z2Z2-K 6mm² DC1500V		REVISION: A/0	FORM NO. B274
			CONSTRUCTION D.W.G	
Conductor	Cross-sectional Area	6mm²		
	Material	Stranded Tinned Copper		
	Conductor.Size (mm)	84/(0.285±0.008)		
	Stranded OD.(mm)	3		
Inner Layer	Material	XLPO		
	AVG Thickness (mm)	0.70		
	Min Thickness (mm)	0.53		
	OD.(mm)	4.45±0.10		
	Color	Black		
Outer Layer	Material	XLPO		
	AVG Thickness (mm)	0.80		
	Min Thickness (mm)	0.58		
	OD. (mm)	6.10±0.15		
	Color	Black	INNER AND OUTER LAYER IS INSEPARABLE.	

2.MECHANICAL CHARACTERISTICS

ITEM		SPECIFICATION	
		INNER LAYER	OUTER LAYER
Elongation	Un-aged	≥125%	≥125%
Strength		≥8MPa	≥8MPa
Cold bend test	(-40 ± 2.0°C × 16h)	No cracking	
Flame test	IEC60332-1	PASS	
Rated temperature	–40℃ up to +90℃		
Thermal endurance properties	Elongation≥50% Temperature index≥120		

SPECIFICATION FOR APPROVAL

SUNKEAN

1.CONSTRUCTION

RATED VOLTAGE	62930 IEC131/ H1Z2Z2-K 4mm² DC1500V		REVISION: A/0	FORM NO. B274
			CONSTRUCTION D.W.G	
Conductor	Cross-sectional Area	4mm²		
	Material	Stranded Tinned Copper		
	Conductor.Size (mm)	56/(0.285±0.008)		
	Stranded OD.(mm)	2.4		
Inner Layer	Material	XLPO		
	AVG Thickness (mm)	0.70		
	Min Thickness (mm)	0.53		
	OD.(mm)	3.85±0.10		
	Color	Black		
Outer Layer	Material	XLPO		
	AVG Thickness (mm)	0.80		
	Min Thickness (mm)	0.58		
	OD. (mm)	5.50±0.15		
	Color	Red	INNER AND OUTER LAYER IS INSEPARABLE.	

2.MECHANICAL CHARACTERISTICS

ITEM		SPECIFICATION	
		INNER LAYER	OUTER LAYER
Elongation	Un-aged	≥125%	≥125%
Strength		≥8MPa	≥8MPa
Cold bend test	(-40 ± 2.0°C × 16h)	No cracking	
Flame test	IEC60332-1	PASS	
Rated temperature	–40℃ up to +90℃		
Thermal endurance properties	Elongation≥50% Temperature index≥120		

SPECIFICATION FOR APPROVAL

SUNKEAN

1.CONSTRUCTION

RATED VOLTAGE	62930 IEC131/ H1Z2Z2-K 6mm² DC1500V		REVISION: A/0	FORM NO. B274
			CONSTRUCTION D.W.G	
Conductor	Cross-sectional Area	6mm²		
	Material	Stranded Tinned Copper		
	Conductor.Size (mm)	84/(0.285±0.008)		
	Stranded OD.(mm)	3.01		
Inner Layer	Material	XLPO		
	AVG Thickness (mm)	0.70		
	Min Thickness (mm)	0.53		
	OD.(mm)	4.45±0.10		
	Color	Black		
Outer Layer	Material	XLPO		
	AVG Thickness (mm)	0.80		
	Min Thickness (mm)	0.58		
	OD. (mm)	6.10±0.15		
	Color	Red	INNER AND OUTER LAYER IS INSEPARABLE.	

2.MECHANICAL CHARACTERISTICS

ITEM		SPECIFICATION	
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Cold bend test	(-40 ± 2.0°C × 16h)	No cracking	
Flame test	IEC60332-1	PASS	
Rated temperature	–40℃ up to +90℃		
Thermal endurance properties	Elongation≥50% Temperature index≥120		

TIGERSOLAR

SAFE ENERGY STORAGE

Create Standard Energy
Storage Products

TIGER
TRANSFORMER

▶▶▶

MVS6750-LV

MV Turnkey Station for1500 VdcString Inverter SG250HX

SAVED INVESTMENT

Up to 7.5 MW block design
Easy transportation due to standard container design
All pre-assembled for easy set-up and commissioning

SAFETY

MV and LV Isolated,independent control room
All key components front accessible, no need walk-in operation

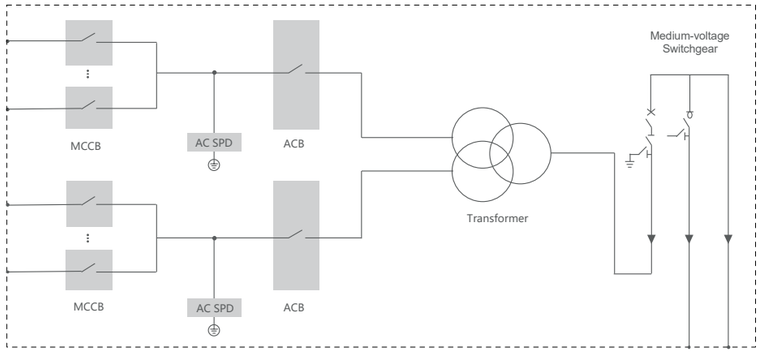
EASY O&M

Online analysis for fast trouble shooting
Modular design, Main device easy replacement

RELIABLE

All components type-tested
Compliance with standards: IEC 60076, IEC 62271, IEC 61439

CIRCUIT DIAGRAM



Type designation	MVS6750-LV
Transformer	
Transformer type	Oil immersed
Rated power	6750 kVA @ 40 ℃
Max. power	7500 kVA @ 30 ℃
Vector group	Dy11y11
LV / MV voltage	0.8 kV / 20 - 35 kV
Maximun input current at nominal voltage	2706 A * 2
Frequency	50 Hz / 60 Hz
Tapping on HV	0, ±2×2.5%
Efficiency	≥99%
Cooling type	ONAN (Oil Natural Air Natural)
Impedance	8% (±10%)
Oil type	Mineral oil (PCB free)
Winding material	Al / Al
Insulation class	A
MV Switchgear	
Insulation type	SF6
Rate voltage	24 - 36 kV
Rate current	630 A
Internal arcing fault	IAC AFL 20kA / 1s
Qty.of feeder	3 feeders
LV Panel	
ACB specification	3200 A / 800 Vac / 3P, 2 pcs
MCCB specification	250 A / 800 Vac / 3P, 30 pcs
Protection	
AC input protection	Circuit breaker
Transformer protection	Oil-temperature, Oil-level, Oil-Pressure
Relay protection	50 / 51, 50N / 51N
LV overvoltage protection	AC Type II (optional: AC Type I + II)
General Data	
Dimensions (W*H*D)	6058 * 2896 * 2438 mm
Approximate weight	23 T
Operating ambient temperature range	-20 to 60 ℃ (optional: -30 to 60 ℃)
Auxiliary power supply	5 kVA / 400 V (optional: max. 40 kVA)
Degree of protection	IP54
Allowable relative humidity range (non-condensing)	0 - 95 %
Operating altitude	1000 m (standard) / > 1000 m (optional)
Communication	Standard: RS485, Ethernet, Optical fiber
Compliance	IEC 60076, IEC 62271-200, IEC 62271-202, IEC 61439-1, EN50588-1

TIGERSOLAR

CRAFTED WITH QUALITY

Safe，Easy to Use and with
High Cost-effectivenes

TIGER
ENERGY STORAGE

▶▶▶

Wasion Energy | 5K–15K Energy Storage All-in-one Machine

Product Series：

WPVI-HPS(5K-15K)

PV Energy Storage All-in-one Machine

Main Features of the Product:

- **AC retrofit & easy installation**
- **Proactively respond to customers**
- **Enable customers to track generation, consumption and storage, with the ability to trade power**
- Back-up generator control, support generator input
- Provide ultimate next generation with cloud-based real time control, trading and monitoring
- With UPS function switch time ⩽ 10ms

Technical Specifications	WPVI-HPS5K	WPVI-HPS8K	WPVI-HPS10K	WPVI-HPS12K	WPVI-HPS15K
AC Input					
AC Input Voltage	230/400V (Three-phase)				
Switching Time	<50ms				
Rated Frequency	50/ 60Hz				
Max. Input Current	7.2A	11.6A	14.5A	17.4A	21.2A
Generator Control & Input	Supported				
AC Output					
AC Output Voltage	230/ 400V				
Max. Output Power	5000W	8000W	10000W	12000W	15000W
Max. Output Power(60s)	5500W	8800W	11000W	13200W	16500W
Rated Frequency	50/60Hz				
Max. Efficiency	98.2%				
Max. Output Current	7.2A	11.6A	14.5A	17.4A	21.2A
THD	<3%				
Power Factor	Adjustable from leading 0.8 to lagging 0.8				
Battery					
Capacity	10/15/20/25/30kWh				
Depth of Discharge	90%				
Battery Life	4000 times				
Min./Max. Voltage	160V/800V				
Max. Discharge Current	100A				
Max. Charge Current	100A				
Battery Type	Lithium/Lead-acid				
Efficiency	95%	98%			
DC Input					
Max. Input Power	8000W	12800W	16000W	19200W	22500W
MPPT Voltage Range	150~1000V				
Max. Input Current/MPPT	20A				
Number of MPPT	2				
Start-up Voltage	160V				
General					
on/off Grid Switching	Yes				
Protection Functions	Yes				
Current Sensors	Yes				
High Voltage Battery	Yes				
Status Indicator Display	Yes				
Embedded Software Package	VPP,Peak shaving				
Remote Control	Yes				
Protection Degree	IP65				
Operating Temperature	-10°C~ 50°C				
Cooling Method	Natural				
Relative Humidity	0~100%				
Weight	40kg(inverter),55kg(per battery pack)				
Dimensions (W*H*D mm)	600*580*300mm(inverter),600*350*300mm(per battery pack)				
External communication port	RS485				
Communication port	Modbus, RS485, Wifi, 4G				
Certificates	IEC62109-1,IEC62109-2,IEC62040,EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4,AS477				
Warranty	5 years				

Wasion Energy | 100kWh / 215kWh Energy Storage Cabinet

WE NODE

Liquid Cooling 100kW / 215kWh

DC Specification	
Battery	LFP 3.2V / 280 Ah
Rated Capacity	215 kWh
Rated Voltage	768 V
Battery Voltage Range	648 V ~ 864 V
Cycling Span	≥6000 times (90%DOD, 80%EOL)
Structure Specification	
Fire Fighting System	Aaerosol / Case Fire Suppressipon
Cooling Method	Liquid Cooling
Dimension	1300 mm * 1330 mm * 2100 mm
Weight	2.2 t
Protection Degree	IP 54
Certificates	UL 9540A, IEC 62619, IEC 62477, UL 1973

Wasion Energy | 313kWh / 344kWh Energy Storage Cabinet

WE NODE PREMIUM

Industrial & Commercial Energy Storage System:
Liquid Cooling 200kW / 344kWh

DC Specification		
Battery	LFP 3.2 V / 314 Ah	LFP 3.2 V / 280 Ah
Rated Capacity	313 kWh	344 kWh
Rated Voltage	998.4 V	1228.8 V
Battery Voltage Range	842.4 V ~ 1123.2 V	1036.8 V ~ 1382.4 V
Cycling Span	8000 times (90%DOD, 70%EOL)	≥6000 times (90%DOD, 80%EOL)
Structure Specification		
Fire Fighting System	Aerosol / Case Fire Suppression	
Cooling Method	Liquid Cooling	
Dimension	1300 mm * 1520 mm * 2300 mm	1600 mm * 1330 mm * 2352 mm
Weight	≈3 t	3.5 t
Protection Degree	IP 54	
Certificates	UL 9540A, IEC 62619, IEC 62477, UL 1973	

DL5.0e

Dyness DL5.0e adopts economic design, and is tailor-made for residential and small commercial application. This LFP battery module supports remote upgrade and APP monitoring, and provides multiple installation methods. It is scalable from 5.12kWh to 256kWh (max. 50 modules in parallel), providing various energy options to meet different requirements.

APP Monitoring (optional)
Real-time monitoring
& Remote upgrade available

Module Design
Flexible expansion

Various Mounting Methods
Wall-mounted,
floor-standing and stacked

High Safety LFP
Cell level monitoring and balancing

Wide Compatibility
Matching with leading inverters

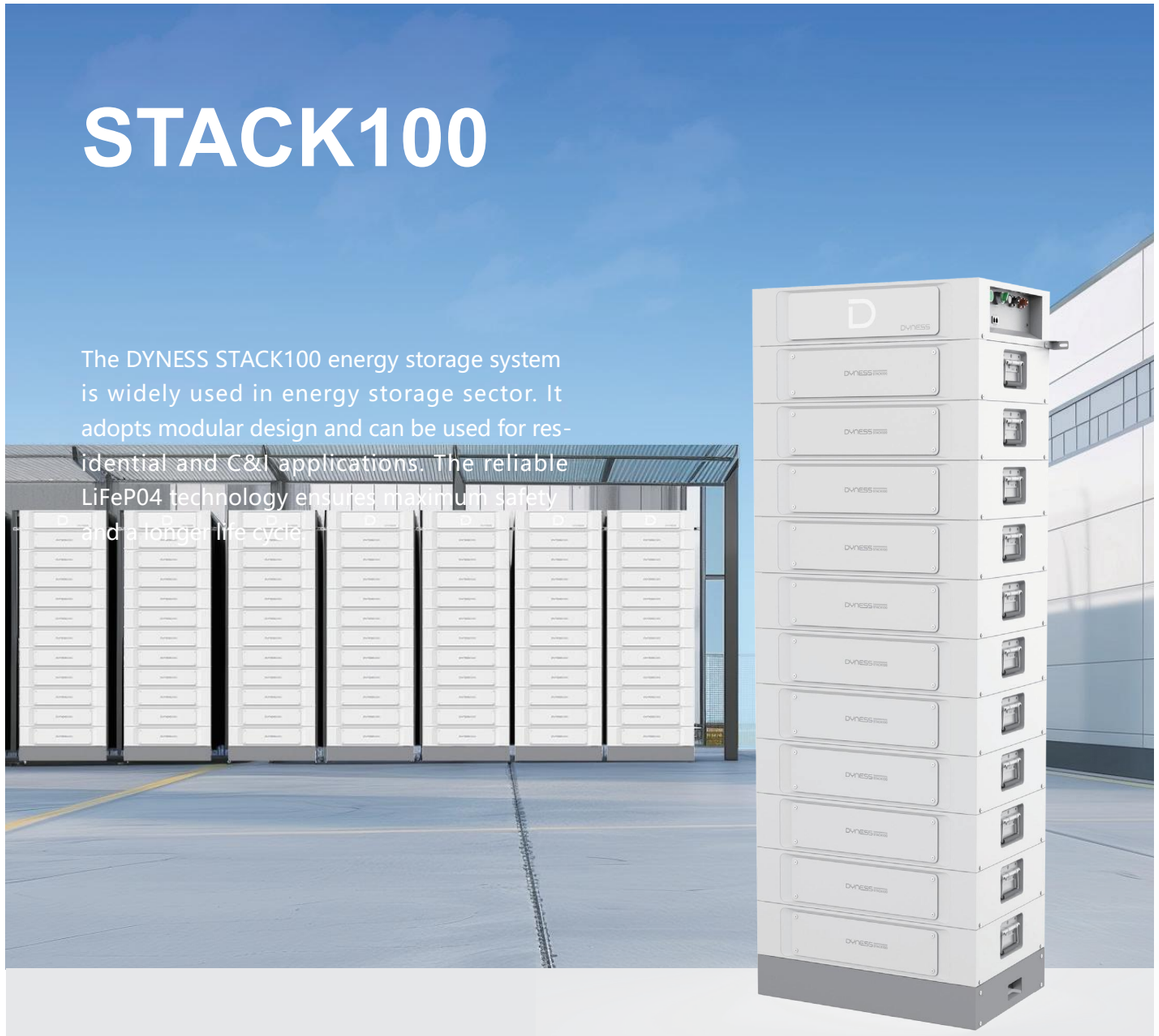
DYNESS

Technical Specifications

Model	DL5.0e
Battery Type	LiFePO4
Nominal Battery Energy	5.12 kWh
Nominal Capacity	100Ah
Nominal Voltage	51.2V
Operating Voltage	44.8 ~ 57.6V
Recomended Charge & Discharge C Rate	0.5C
Maximum Discharge C rate	1C
Recommended Charge/Discharge Current	50A
Max. Power Charge/Discharge Current	Charge 75A Discharge 100A
Peak Power Charge/Discharge Current	110A (15s)
Depth of Discharge (DOD)	90%
Net Weight	54 kg
Dimension[W*D*H]	558*545*150 mm
Charging Temp. Range	0~55°C
Discharging Temp. Range	-20~55°C
Communication	CAN/RS485/RS232
Cycle Life[1]	≥3000 Cycles
Protection Level	IP20
Expansion	Up to 50 units in parallel
Pros	Can be used in both off-grid and hybrid setups, compact design
Certification & Safety Standard	UN38.3/CE-EMC
Compatible Inverters	SMA/Victron/Ingeteam/Delios/Goodwe/Solis/Deye/SAJ /Voltronic/Sungrow etc.

[1]Test conditions: 0.2C Charging/Discharging, @25℃, 90% DOD

STACK100



The DYNESS STACK100 energy storage system is widely used in energy storage sector. It adopts modular design and can be used for residential and C&I applications. The reliable LiFeP04 technology ensures maximum safety and a longer life cycle.

Each PACK has an independent fire extinguishing device.

1C discharge, built-in air-cooling system

Single system capacity: 15.36-76.8kwh, expandable to a maximum of 921.6kWh in parallel

Convenient installation and Total installation time ≤1h

Flexible space layout ability

DYNESS

Technical Specifications

Model	STACK100
Battery Type	LiFePO4
Module Voltage/Capacity	51.2V/100Ah
System Modules Serial Number	3~15
System Energy Range	15.36-76.8kWh
Operating Voltage	134-876V
Recommended Charge/Discharge Current	50A (0.5C)
Max. Charge/Discharge Current	100A (1C)
Peak Discharge Current (2min 25℃)	125A(1.25C)
Depth of Discharge	95%
Communication	CAN/RS485
Cycle Life [1]	Unlimited cycles / 10 Years
Signal Module Weight	47Kg
Max. Single Cluster Dimension[W*D*H]	591*390*1700mm – 11 module
Charging Temp. Range	0 ~ 55℃
Discharging Temp. Range	-20 ~ 55℃
Protection Level	IP20
Fire Protection System	Aerosol fire extinguisher
Installation method	Stack type
Cooling method	Forced wind cooling
WIFI Module	Built-in WIFI module; APP OTA function
Certification & Safety Standard	CE-EMC/CE-RED/62619/63056/62477/62040 /UN38.3
Compatible Inverters	Deye/Goodwe/Solis/SAJ/Sinexcel/Hoymiles/Gro - watt/Ecatus/Sermatec/ATESS/Sunways etc.

[1]Test conditions: 0.2C Charging/Discharging, @25℃, 95% DOD

HiTHIUM | 344kWh Energy Storage Cabinet

HTHIUM

HiTHIUM ∞ BLOCK

ESS **Cabinet** 344 kWh

Liquid-cooled battery storage system

Liquid-cooled battery storage system based on HiTHIUM prismatic LFP ESS Cells 280 Ah with high cyclic lifetime

Improved safety characteristics and specially optimised for the highest requirements on safety, reliability and performance. Suitable e.g. for industrial, utility, and grid serving applications.

- Product certifications:
  IEC 62619, IEC 62477, IEC 63056, IEC 61000, UL 1973, UL 9540A, NFPA 855, UN 38.3
- Company certifications:
  ISO 9001, ISO 14001, ISO 45001, SA 8000
- Environmental Compliance:
  RoHS, REACH, Cobalt free

High safety

- High thermal stability thanks to liquid cooling
- Multi-stage, active fire protection system, compliance to NFPA 855
- Use of highly safe prismatic HiTHIUM LFP cells
- Ultra-wide operating temperature range

Low LCOS (Levelised Cost of Storage)

- Excellent thermal management improves energy throughput by ensuring optimal operating temperature
- High energy density
- Highly integrated: including thermal management system, fire protection system, BMS, etc.

ESS **Cabinet** 344 kWh

Liquid-cooled battery storage system based on prismatic LFP cells with high cyclic lifetime

GENERAL	
Battery Type	HiTHIUM LFP280-1P48S
No. of Battery Modules	4 … 8
Configuration	Serial connection of modules
Cooling Method	Liquid cooling
BMS Communication	CAN
Gravimetric	≥ 98 Wh/kg [1]
Volumetric	≥ 86 Wh/L [1]
Application Altitude	≤ 3.000 m

ELECTRICAL	
Nominal Voltage Cabinet	1.228,8 V [1]
Nominal Voltage Module	153,6 V
Operating Voltage Cabinet	960 … 1.401,6 V [1]
Operating Voltage Module	T > 0 °C 120 … 175,2 V [1]
	T ≤ 0 °C 96 … 175,2 V [1]
Nominal Energy Cabinet	344,06 kWh [1, 2, 3]
Nominal Energy Module	43,01 kWh [2, 3]
Nominal SOC at delivery	27 % [3]
Nominal Charge/Discharge Rate	0,5 P / 0,5 P
Round Trip Efficiency	≥ 94 %

[1] *8 modules*
[2] *0,5 P / 0,5 P*
[3] *25°C +/- 2,0*
[4] *ambient temperature*

MECHANICAL	
Dimensions (L x W x H)	1.300 x 1.300 x 2.350 mm
Weight Cabinet	< 3.500 kg [1]
Weight Battery Module	310 kg
Protection Level	IP 55

TEMPERATURE RANGE	
Operating	-30 °C … 50 °C [4]
Storing (recommended)	-20 °C … 35 °C [4]

PRODUCT CERTIFICATIONS	
Safety Certificates	IEC 62619, IEC 62477, IEC 63056, IEC 61000, UL 1973, UL 9540A, NFPA 855
Safe Transportation	UN 38.3

ENVIRONMENTAL	
Compliance	RoHS, REACH, Cobalt free
Battery Regulation (EU)	2023/1542

COMPANY CERTIFICATIONS	
	ISO 9001, ISO 14001, ISO 45001, SA 8000

Hithium_DS_ESS Cabinet_344kWh_Datasheet_20240517_V3.6_EU

HiTHIUM | 5015kWh Energy Storage Cabinet

HTHIUM

HiTHIUM ∞ BLOCK

ESS **Container**
5.015 MWh

Liquid-cooled battery storage system

Liquid-cooled battery storage system based on HiTHIUM prismatic LFP ESS Cells 314 Ah with very high cyclic lifetime.

Improved safety characteristics and specially optimised for the highest requirements on safety, reliability and performance. Suitable e.g. for industrial, utility, and grid serving applications.

- Product certifications:
  UL 1973, UL 9540A, UN 38.3
- Company certifications:
  ISO 9001, ISO 14001, ISO 45001, SA 8000
- Environmental Compliance:
  RoHS, REACH, Cobalt free

High safety

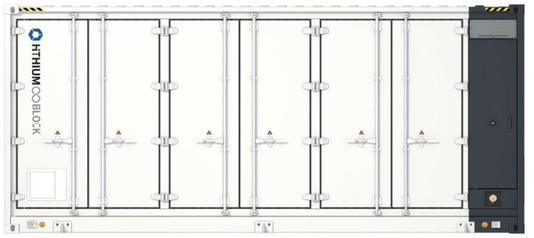
- High thermal stability thanks to liquid cooling
- Multi-stage, active fire protection system, compliance to NFPA 855
- Use of highly safe prismatic HiTHIUM LFP cells
- Dedicated cell monitoring and protection system

Low LCOS (Levelised Cost of Storage)

- Excellent thermal management improves energy throughput by ensuring optimal operating temperature
- Highly integrated: including thermal management system, fire protection system, BMS, etc.
- Supports back to back and side by side installations

ESS **Container**
5.015 MWh

Liquid-cooled battery storage system based on prismatic LFP cells with very high cyclic lifetime



GENERAL	
Battery Type	HiTHIUM LFP314-1P104S
No. of Battery Modules	48 (12 x 4)
Configuration	12*1P416S
Cooling Method	Liquid Cooling
BMS Communication	CAN, RS485, Ethernet
Gravimetric	≥ 119 Wh/kg
Volumetric	≥ 117 Wh/L
Application Altitude	≤ 4,000 m

ELECTRICAL	
Nominal Voltage Container	1,331.2 V
Operating Voltage Container	1,040 ...1,500V
Nominal Energy Container	5,015.96 kWh [1, 2]
Nominal SOC at delivery	27 % [2]
Nominal Charge/Discharge Rate	0.5 P / 0.5 P
Round Trip Efficiency	> 94 %

[1] 0.5 P / 0.5 P
[2] 25°C +/- 2.0
[3] ambient temperature

MECHANICAL	
Dimensions (L x W x H)	6,058 x 2,438 x 2,896 mm
Weight Container (20 ft.)	< 42,000 kg
Protection Level	IP 55

TEMPERATURE RANGE	
Operating	-30 °C ... 55 °C [3]
Storing (recommended)	-20 °C ... 35 °C [3]

PRODUCT CERTIFICATIONS	
Certificates and Reports	UL 1973, UL 9540A, NFPA 855
Safe Transportation	UN 38.3

ENVIRONMENTAL	
Compliance	RoHS, REACH, Cobalt free
Battery Regulation (EU)	2023/1542

COMPANY CERTIFICATIONS	
	ISO 9001, ISO 14001, ISO 45001, SA 8000

Hithium_DS_ESS Container_5015kWh_Datasheet (12*1P416S)_20240605_V1.0_US

TIGERSOLAR

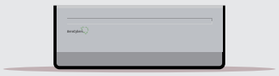
TIGER POWER STATION MAINTENANCE

►►►

The AeroCybers cleaning system is the world's first to use drones for automatic identification, capture, release, and relocation of cleaning robots. It enables real-time instructions and data transmission between drones, robots, charging stations, and cloud platforms, all powered by wireless technology. Plus, it offers compatibility across different products and industries with detachable mounting devices.

- High adaptability of the scene, to meet the needs of water floating, mountain, desert and other complex power station
- Automatic weather monitoring, drone navigation and drone-robot coordination supported by wireless charging can achieve zero labour on-site and work efficiency over 90%
- Robots synchronous online inspection while performing cleaning job
- The requirements of distributed and centralized photovoltaic power stations can be realized through our “Lego pick and build”solutions

Pick-up Truck Mobile System



Base Station Fixed System

Detachable Flight Mount System

CAN BE CUSTOMIZED TO MEET ALL DIFFERENT SCENARIOS