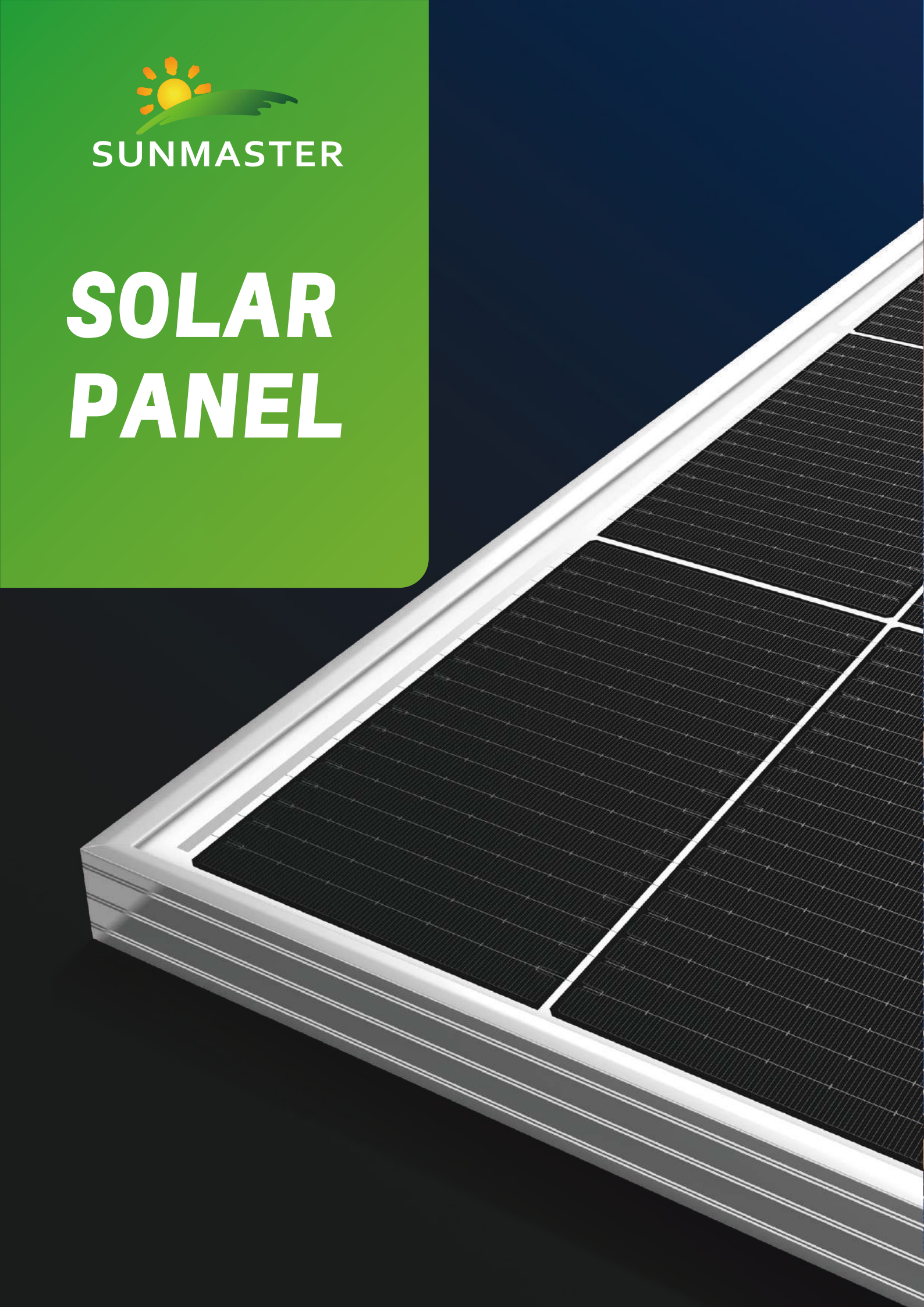
SUNMASTER

SOLAR PANEL



More
+Power
Less Expense

SunMaster Solar Co., Ltd
Add: No. 2819, Haitang East Road, Jinhua Zhejiang China

Mob: +86 139 6796 1680
Whats APP: +86 139 6796 1680

Web: www.chinasunmaster.com
Mail: info@chinasunmaster.com

Europe Branch:
Via AngeloMoro 61, San Donato Milanese, Italy

Mob: +39 348 350 4129

Mail: export@chinasunmaster.com





CONTENT

Company Profile 01-02

Standard solar panel 03-18

N-TYPE 03-10



182 MONO
420-445W
3 - 4



182 MONO
580-600W
5-6

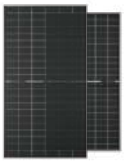


182 MONO
620-630W
7-8



210 MONO
700-720W
9-10

HJT-TYPE 11-12



210 MONO
710-730W
11-12

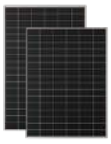
SHINGLED PV MODULE 13



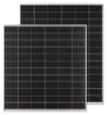
520-545W
13

CASE PRESENTATION 14

Customized solar panels 15-26



182 MONO
330-380W
14-15



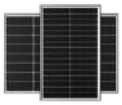
182 MONO
250-300W
16-17



182 MONO
160-240W
18-19



182 MONO
100-150W
20-21



182 MONO
50-90W
22-23



182 MONO
10-40W
24-26

Company **Overview**

It’s a company specializing in providing solar panels, off-grid photovoltaic solutions, solar street lights, wind and solar hybrid lamps, small and medium-sized solar power generation systems, solar home lighting and other products.





What SunMaster Technology offer :

Pre-sales services

- Free customized design of optimum solar system
- Free Dialux simulation drawing
- Free consultation and design lighting solutions

After-sales services

- Offer detail installation instruction and documentation
- Offer training and test & commissioning
- Long-life technology support and warranty



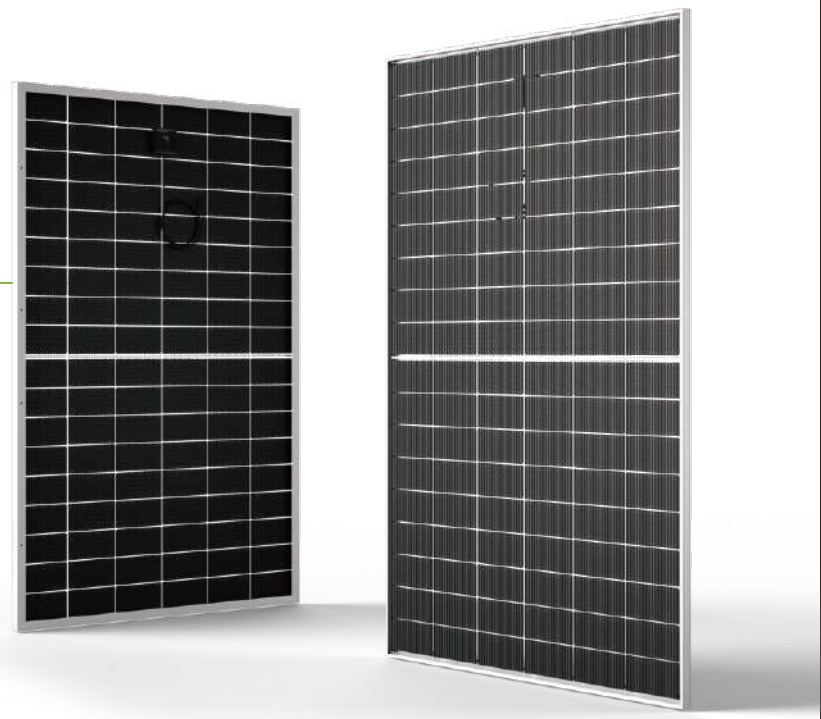
SM SINGLE GLASS

Standard solar panel

SM420-445W

N-TYPE

182 MONO-Bifacial MODULE

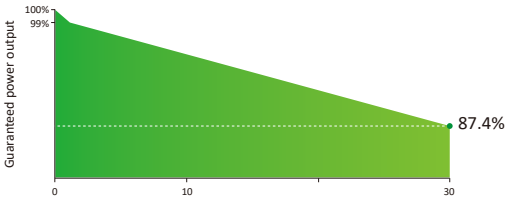


Linear performance warranty

12 Year Product Warranty

30 Year Linear Warranty

0.4% Annual Degradation Over **30** Years



420-445W | **-0.55%** power attenuation | **30 years** Power warranty

Key Features

N-type Technology

N-type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 2.0 Technology

N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.

Duplex power generation

The power gain on both sides increases with the light received on theback, up to 25%.

Enhanced Mechanical Load

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

SMBB Technology

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

Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.

Comprehensive

IEC 61215-1:2021,IEC 61730-1:2023
IEC61701/ IEC62716/IEC62804
IS09001:2015:Quality Management System
ISO14001:2015:Environment Management System
ISO45001:2018:Occupational Health and Safety Management Systems

Mechanical Characteristic

Cell type	182x91mm N-Type
Number of cells	108cells (2x54)
Module dimensions	1722x1134x30 mm
Weight	23.5 KG
Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Junction box	IP68 Rated,MC4 Compatible
Cable	4 mm²,300 mm standard
Frame	Anodized aluminium alloy

Temperature Characteristics

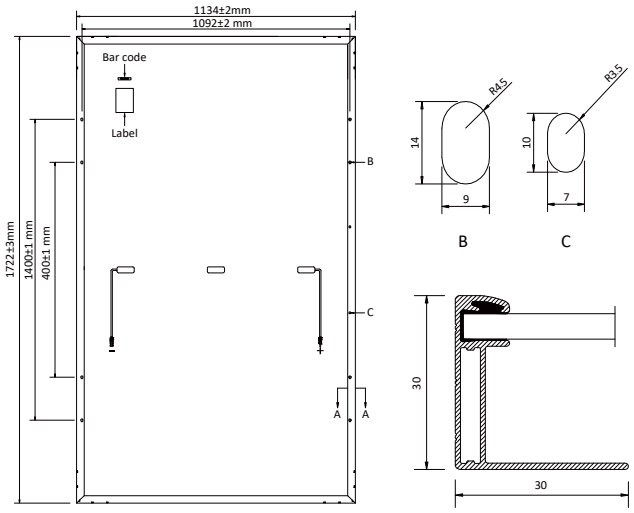
Nominal Operating Cell Temperature (NOCT)	45 ± 2°C
Temperature Coefficients of Pmax	-0.29 % /°C
Temperature Coefficients of Voc	-0.25 % /°C
Temperature Coefficients of Isc	0.045% /°C

Packaging

Standard packaging	36pcs/pallet
Module quantity per 40 HQ container	936pcs

Engineering Drawings

Unit: mm



Rear View

Section A-A

Specifications in this datasheet are subject to change without prior notice.

Electrical Characteristics at STC

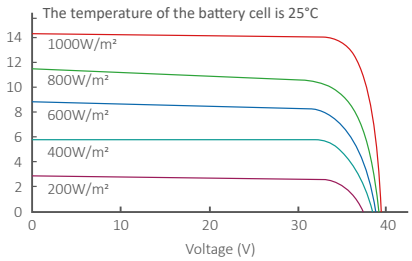
Maximum Power (Pmax)	420 W	425 W	430 W	435 W	440 W	445 W
Voltage at Maximum Power (Vmp)	31.37 V	31.49 V	31.61 V	31.73 V	31.85 V	31.97 V
Current at Maximum Power (Imp)	13.39 A	13.50 A	13.60 A	13.71 A	13.81 A	13.92 A
Open Circuit Voltage (Voc)	37.43 V	37.55 V	37.67 V	37.79 V	37.91 V	38.03 V
Short Circuit Current (Isc)	14.12 A	14.23 A	14.34 A	14.45 A	14.56 A	14.67 A
Module Efficiency(%)	23.3	23.5	23.7	23.8	24.0	24.1

Electrical Characteristics at NOCT

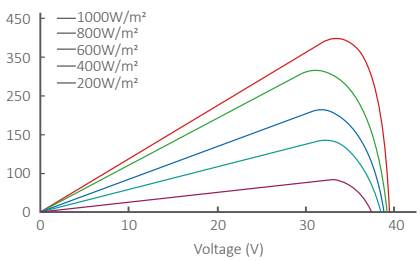
Maximum Power (Pmax)	420 W	425 W	430 W	435 W	440 W	445 W
Voltage at Maximum Power (Vmp)	31.37 V	31.49 V	31.61 V	31.73 V	31.85 V	31.97 V
Current at Maximum Power (Imp)	13.39 A	13.50 A	13.60 A	13.71 A	13.81 A	13.92 A
Open Circuit Voltage (Voc)	37.43 V	37.55 V	37.67 V	37.79 V	37.91 V	38.03 V
Short Circuit Current (Isc)	14.12 A	14.23 A	14.34 A	14.45 A	14.56 A	14.67 A

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m2,Ambient Temperature 20℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

IV Curves



Current-Voltage and Power-Voltage Curves



Current-Voltage Curves at Different Temperatures

SM DOUBLE GLASS

Standard solar panel

SM580-600W

N-TYPE

182 MONO-Bifacial MODULE

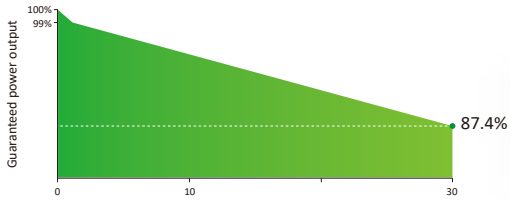


Linear performance warranty

12 Year Product Warranty

30 Year Linear Warranty

0.4% Annual Degradation Over **30** Years



580-600W | **-0.55%** power attenuation | **30 years** Power warranty

Key Features

N-type Technology

N-type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 2.0 Technology

N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.

Duplex power generation

The power gain on both sides increases with the light received on theback, up to 25%.

Enhanced Mechanical Load

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

SMBB Technology

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

Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.

Comprehensive

IEC 61215-1:2021,IEC 61730-1:2023
IEC61701/ IEC62716/IEC62804
IS09001:2015:Quality Management System
ISO14001:2015:Environment Management System
ISO45001:2018:Occupational Health and Safety Management Systems

Mechanical Characteristic

Cell type	182x91mm N-Type
Number of cells	144cells (2x72)
Module dimensions	2278x1134x30mm
Weight	30KG
Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Junction box	IP68 Rated,MC4 Compatible
Cable	4 mm²,300 mm standard
Frame	Silver, anodized aluminium alloy

Temperature Characteristics

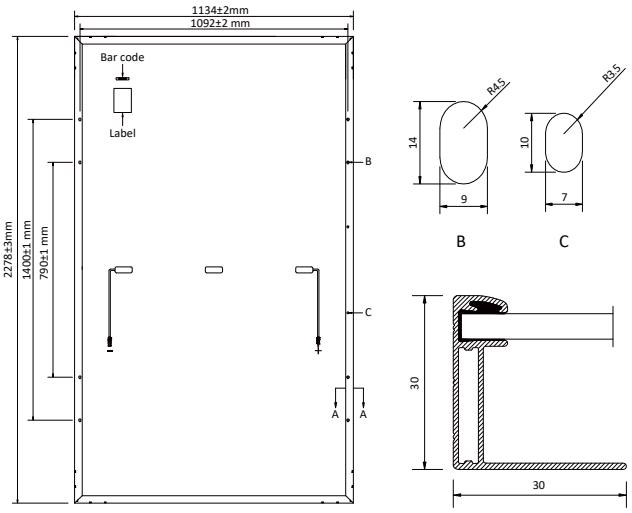
Nominal Operating Cell Temperature (NOCT)	45 ± 2°C
Temperature Coefficients of Pmax	-0.29 % /°C
Temperature Coefficients of Voc	-0.25 % /°C
Temperature Coefficients of Isc	0.045% /°C

Packaging

Standard packaging	36pcs/pallet
Module quantity per 40 HQ container	720pcs

Engineering Drawings

Unit: mm



Rear View

Section A-A

Specifications in this datasheet are subject to change without prior notice.

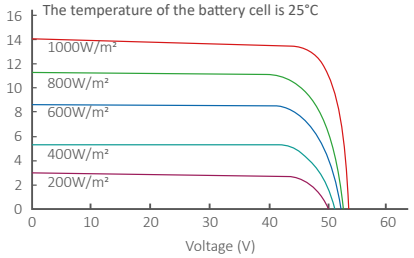
Electrical Characteristics at STC

Maximum Power (Pmax)	580 W	585 W	590 W	595 W	600 W
Voltage at Maximum Power (Vmp)	44.02 V	44.22 V	44.43 V	44.63 V	44.83 V
Current at Maximum Power (Imp)	13.18 A	13.23 A	13.28 A	13.33 A	13.38 A
Open Circuit Voltage (Voc)	51.95 V	52.16 V	52.37 V	52.59 V	52.81 V
Short Circuit Current (Isc)	13.84 A	13.89 A	13.94 A	13.99 A	14.03 A
Module Efficiency(%)	23.3	23.5	23.7	23.8	24.0

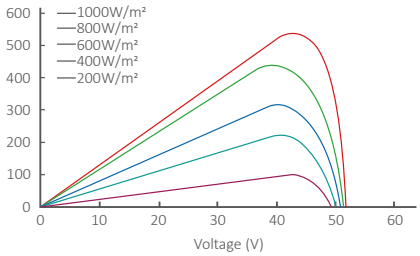
Bifacial Performance Parameters (Rear-side Gain)

5%	Maximum Power (Pmax)	609 W	614 W	620 W	625 W	630 W
	Module Efficiency (η)	24.5 %	24.7 %	24.8 %	25.0 %	25.2 %
15%	Maximum Power (Pmax)	667 W	673 W	679 W	684 W	690 W
	Module Efficiency (η)	26.8 %	27.0 %	27.2 %	27.4 %	27.6 %
20%	Maximum Power (Pmax)	696 W	702 W	708 W	714 W	720 W
	Module Efficiency (η)	29.2 %	29.4 %	29.6 %	29.8 %	30.0 %

IV Curves



Current-Voltage and Power-Voltage Curves



Current-Voltage Curves at Different Temperatures

SM DOUBLE GLASS

Standard solar panel

SM620-630W

N-TYPE

182 MONO-Bifacial MODULE

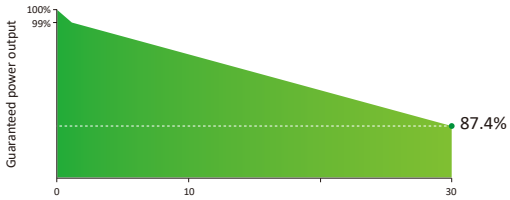


Linear performance warranty

12 Year Product Warranty

30 Year Linear Warranty

0.4% Annual Degradation Over **30** Years



620-630W | **-0.55%** power attenuation | **30 years** Power warranty

Key Features

N-type Technology

N-type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 2.0 Technology

N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.

Duplex power generation

The power gain on both sides increases with the light received on theback, up to 25%.

Enhanced Mechanical Load

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

SMBB Technology

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

Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.

Comprehensive

IEC 61215-1:2021,IEC 61730-1:2023
IEC61701/ IEC62716/IEC62804
IS09001:2015:Quality Management System
ISO14001:2015:Environment Management System
ISO45001:2018:Occupational Health and Safety Management Systems

Mechanical Characteristic

Cell type	182x105mm N-Type
Number of cells	132cells (2x66)
Module dimensions	2382x1134x30mm
Weight	32.5KG
Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Junction box	IP68 Rated,MC4 Compatible
Cable	4 mm²,300 mm standard
Frame	Silver, anodized aluminium alloy

Temperature Characteristics

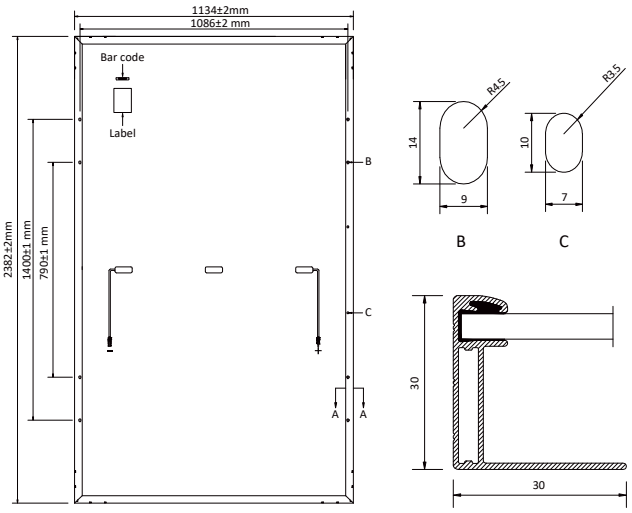
Nominal Operating Cell Temperature (NOCT)	45 ± 2°C
Temperature Coefficients of Pmax	-0.29 % /°C
Temperature Coefficients of Voc	-0.25 % /°C
Temperature Coefficients of Isc	0.045% /°C

Packaging

Standard packaging	36pcs/pallet
Module quantity per 40 HQ container	720pcs

Engineering Drawings

Unit: mm



Rear View

Section A-A

Specifications in this datasheet are subject to change without prior notice.

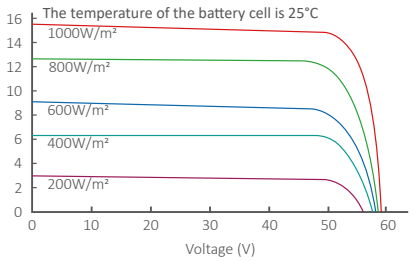
Electrical Characteristics at STC

Maximum Power (Pmax)	620 W	625 W	630 W
Voltage at Maximum Power (Vmp)	41.4 V	41.7 V	41.95 V
Current at Maximum Power (Imp)	14.98 A	14.99 A	15.02 A
Open Circuit Voltage (Voc)	49.6 V	49.9 V	50.2 V
Short Circuit Current (Isc)	15.91 A	15.92 A	15.94 A
Module Efficiency(%)	22.95	23.14	23.32

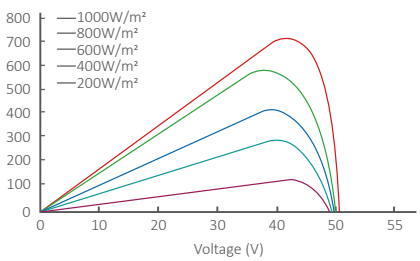
Bifacial Performance Parameters (Rear-side Gain)

5%	Maximum Power (Pmax)	651 W	656 W	662 W
	Module Efficiency (η)	24.5 %	24.7 %	24.8 %
15%	Maximum Power (Pmax)	713 W	719 W	725 W
	Module Efficiency (η)	26.8 %	27.0 %	27.2 %
20%	Maximum Power (Pmax)	744 W	750 W	756 W
	Module Efficiency (η)	29.2 %	29.4 %	29.6 %

IV Curves



Current-Voltage and Power-Voltage Curves



Current-Voltage Curves at Different Temperatures

SM DOUBLE GLASS

Standard solar panel

SM700-720W

N-TYPE

210 MONO-Bifacial MODULE

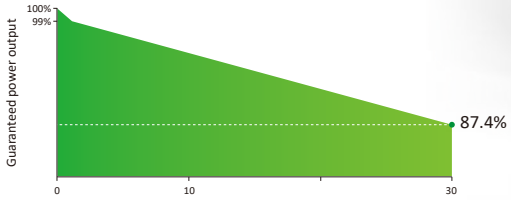


Linear performance warranty

12 Year Product Warranty

30 Year Linear Warranty

0.4% Annual Degradation Over **30** Years



700-720W | **-0.55%** power attenuation | **30 years** Power warranty

Key Features

N-type Technology

N-type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 2.0 Technology

N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.

Duplex power generation

The power gain on both sides increases with the light received on theback, up to 25%.

Enhanced Mechanical Load

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

SMBB Technology

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

Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.

Comprehensive

IEC 61215-1:2021,IEC 61730-1:2023
IEC61701/ IEC62716/IEC62804
IS09001:2015:Quality Management System
ISO14001:2015:Environment Management System
ISO45001:2018:Occupational Health and Safety Management Systems

Mechanical Characteristic

Cell type	210x105mm N-Type
Number of cells	132cells (2x66)
Module dimensions	2384x1303x33mm
Weight	37KG
Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Junction box	IP68 Rated,MC4 Compatible
Cable	4 mm²,300 mm standard
Frame	Silver, anodized aluminium alloy

Temperature Characteristics

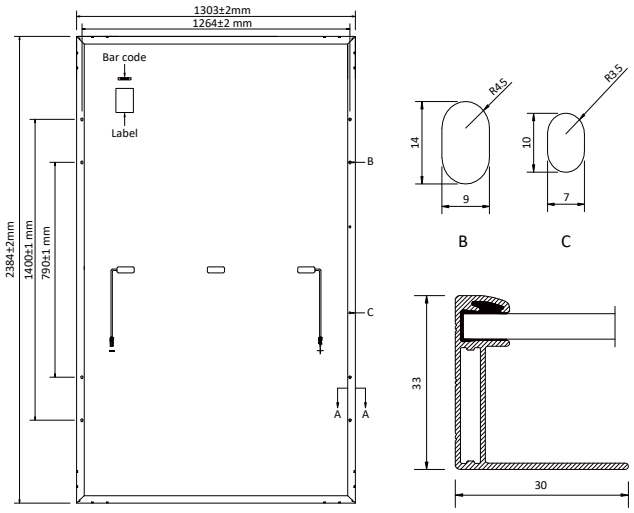
Nominal Operating Cell Temperature (NOCT)	45 ± 2°C
Temperature Coefficients of Pmax	-0.29 % /°C
Temperature Coefficients of Voc	-0.25 % /°C
Temperature Coefficients of Isc	0.045% /°C

Packaging

Standard packaging	33pcs/pallet
Module quantity per 40 HQ container	594pcs

Engineering Drawings

Unit: mm



Rear View

Section A-A

Specifications in this datasheet are subject to change without prior notice.

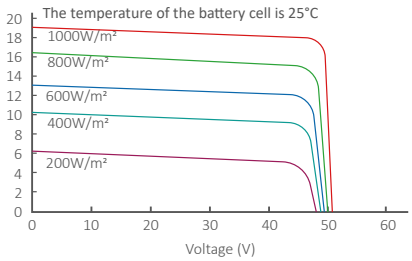
Electrical Characteristics at STC

Maximum Power (Pmax)	700 W	705 W	710 W	715 W	720 W
Voltage at Maximum Power (Vmp)	40.5 V	40.7 V	40.9 V	41.1 V	41.3 V
Current at Maximum Power (Imp)	17.28 A	17.32 A	17.36 A	17.4 A	17.44 A
Open Circuit Voltage (Voc)	48.6 V	48.8 V	49 V	49.2V	49.4 V
Short Circuit Current (Isc)	18.32 A	18.36 A	18.4 A	18.44 A	18.49 A
Module Efficiency(%)	23.3	23.5	23.7	23.8	24.0

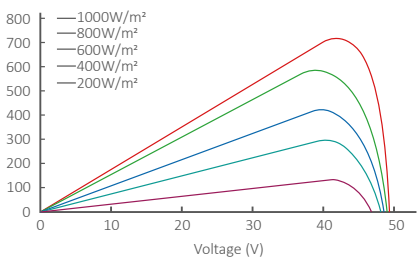
Bifacial Performance Parameters (Rear-side Gain)

5%	Maximum Power (Pmax)	735 W	740 W	746 W	751 W	756 W
	Module Efficiency (η)	24.5 %	24.7 %	24.8 %	25.0 %	25.2 %
15%	Maximum Power (Pmax)	805 W	811 W	817 W	822 W	828 W
	Module Efficiency (η)	26.8 %	27.0 %	27.2 %	27.4 %	27.6 %
20%	Maximum Power (Pmax)	840 W	846 W	852 W	858 W	864 W
	Module Efficiency (η)	29.2 %	29.4 %	29.6 %	29.8 %	30.0 %

IV Curves



Current-Voltage and Power-Voltage Curves



Current-Voltage Curves at Different Temperatures

SM DOUBLE GLASS

Standard solar panel

SM710-730W

HJT-TYPE

MBB Half-cut Bifacial Module



710-730W

-0.55%
power attenuation

30 years
Power warranty

Key Features

N-type Technology
N-type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 2.0 Technology
N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.

Duplex power generation
The power gain on both sides increases with the light received on theback, up to 25%.

Enhanced Mechanical Load
Certified to withstand:
wind load (2400 Pascal) and
snow load (5400Pascal).

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

Anti-PID Guarantee
Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.

Comprehensive

IEC 61215-1:2021,IEC 61730-1:2023
IEC61701/ IEC62716/IEC62804
IS09001:2015:Quality Management System
ISO14001:2015:Environment Management System
ISO45001:2018:Occupational Health and Safety Management Systems

Mechanical Characteristic

Cell type	210x105mm N-Type
Number of cells	132cells (2x66)
Module dimensions	2384x1303x33mm
Weight	37KG
Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Junction box	IP68 Rated,MC4 Compatible
Cable	4 mm²,300 mm standard
Frame	Silver, anodized aluminium alloy

Temperature Characteristics

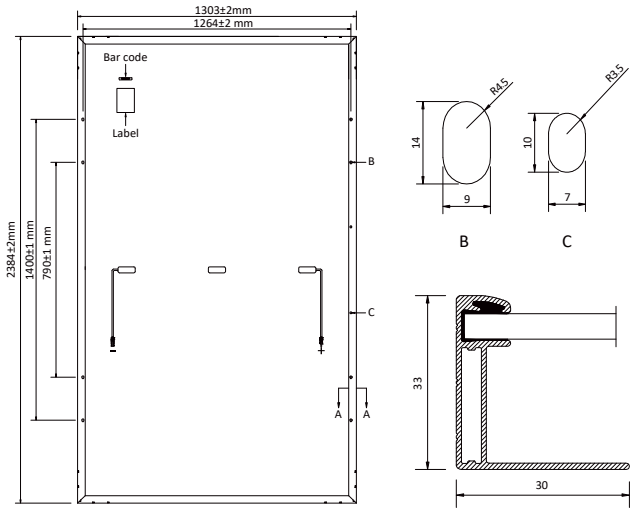
Nominal Operating Cell Temperature (NOCT)	45 ± 2°C
Temperature Coefficients of Pmax	-0.29 % /°C
Temperature Coefficients of Voc	-0.25 % /°C
Temperature Coefficients of Isc	0.045% /°C

Packaging

Standard packaging	33pcs/pallet
Module quantity per 40 HQ container	594pcs

Engineering Drawings

Unit: mm



Rear View

Section A-A

Specifications in this datasheet are subject to change without prior notice.

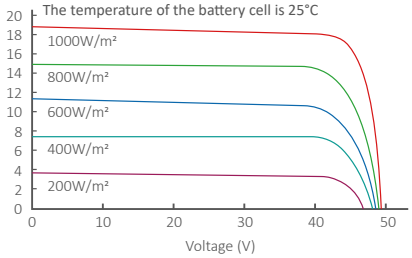
Electrical Characteristics at STC

Maximum Power (Pmax)	710 W	715 W	720 W	725 W	730 W
Voltage at Maximum Power (Vmp)	41.93 V	42.00 V	42.07 V	42.14 V	42.21 V
Current at Maximum Power (Imp)	16.95 A	17.05 A	17.15 A	17.25 A	17.35 A
Open Circuit Voltage (Voc)	50.01 V	50.09 V	50.17 V	50.25 V	50.33 V
Short Circuit Current (Isc)	18.00 A	18.10 A	18.20 A	18.30 A	18.40 A
Module Efficiency(%)	23.3	23.5	23.7	23.8	24.0

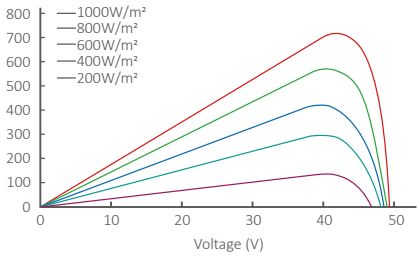
Bifacial Performance Parameters (Rear-side Gain)

5%	Maximum Power (Pmax)	746 W	751 W	756 W	761 W	767 W
	Module Efficiency (η)	24.5 %	24.7 %	24.8 %	25.0 %	25.2 %
15%	Maximum Power (Pmax)	817 W	822 W	828 W	834 W	840 W
	Module Efficiency (η)	26.8 %	27.0 %	27.2 %	27.4 %	27.6 %
20%	Maximum Power (Pmax)	852 W	858 W	864 W	870 W	876 W
	Module Efficiency (η)	29.2 %	29.4 %	29.6 %	29.8 %	30.0 %

IV Curves



Current-Voltage and Power-Voltage Curves



Current-Voltage Curves at Different Temperatures

SunMaster 6

Standard solar panel

405-670W

Shingled PV Module

Based on M10-210mm wafer, best choice for ultra-large power plants. Advanced module technology delivers superior module efficiency. Globally validated bifacial energy yield. High module quality ensures long-term reliability.

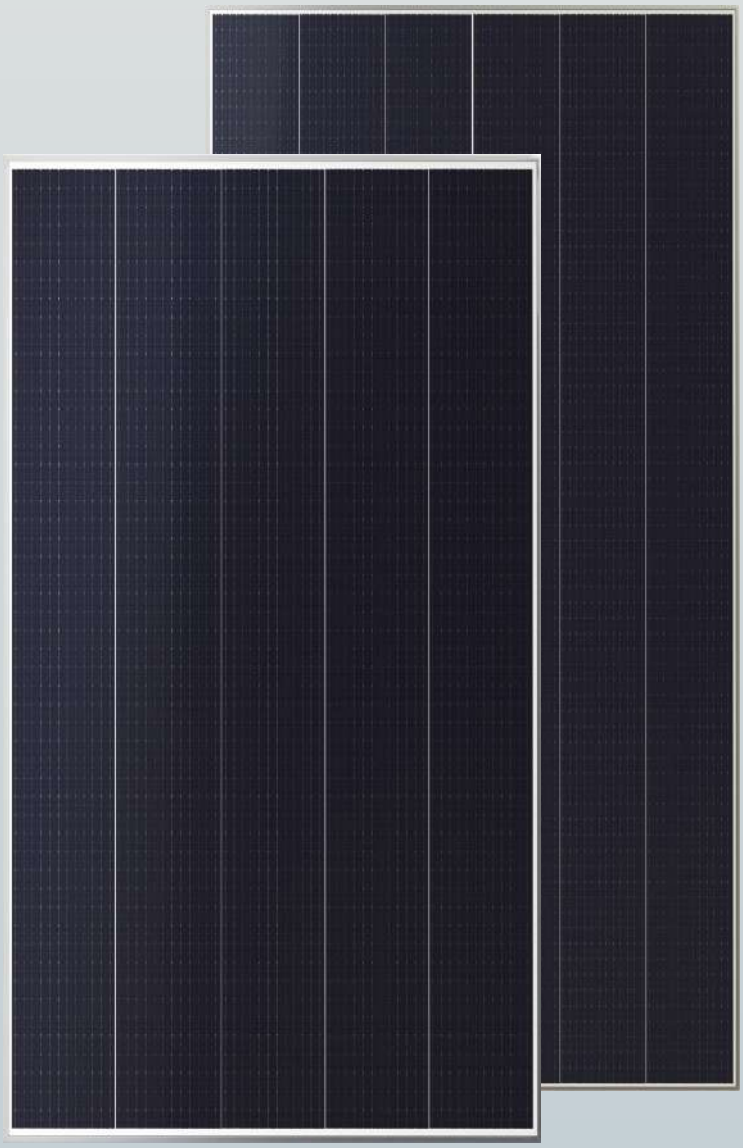
Super Performance & Stable Returns
Low hot spot & anti-PID, to ensure module operation optimally

Various Application Scenarios
Strong weather resistance, easy installation in deserts, coastal areas, mountains and various roofs

Technology & Process Upgrade
210+10BB+half-cell, higher power generation with the same installation

Comprehensive Products &System Certificates

Module	Maximum Powoer	Size / Weighti
SM-SPSG-405~425M12	405-425W	1808*1086*30mm
SM-SPSG-495~520M12	495-520W	2275*1086*30mm
SM-SPSG-535~560M12	535-560W	2384*1086*30mm
SM-SPDG-530~555M12	530~555W	2384*1092*30mm
SM-SPDG-585~610M12	585~610W	2185*1303*30mm
SM-SPDG-645~670M12	645-670W	2384*1303*30mm



Case Presentation



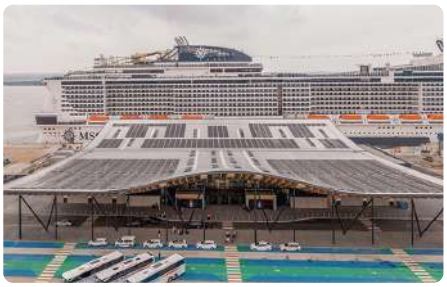
















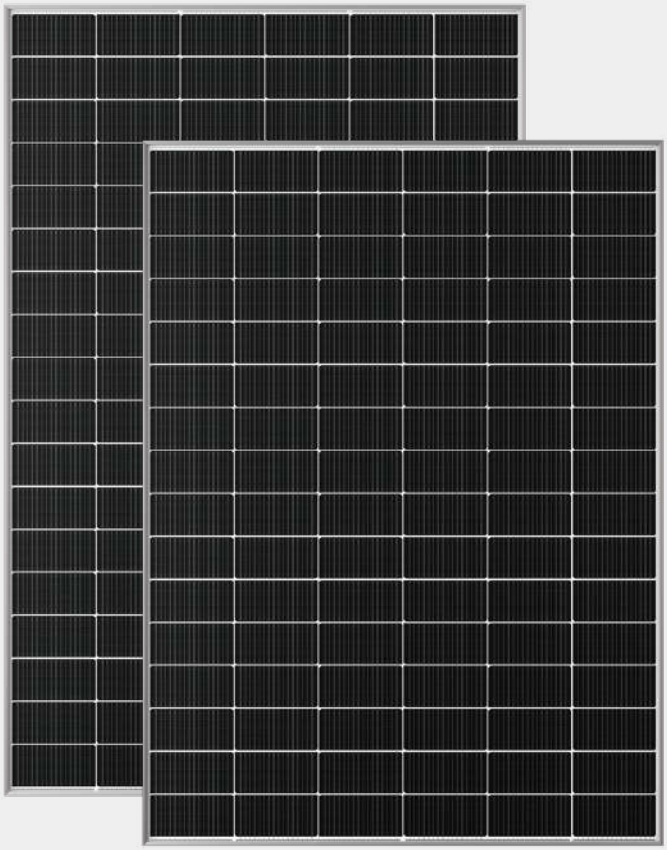


Customized solar panels

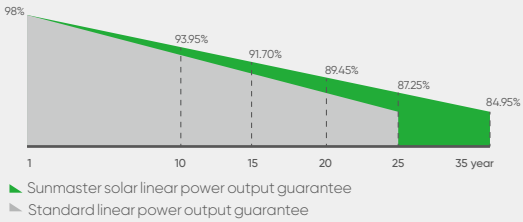
SunMaster 1

SM330-380M

182mm Cells Mono P-TYPE/N-TYPE with MBB & Half-cut Technology



Quality Guarantee



330-380W | **-0.55%** Power attenuation | **30years** Power warranty

Comprehensive Products and System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001-

2015/Quality management system

ISO 14001-

2015/Standards for environmental management system

ISO 45001-

2018/International standards for occupational health & safety

Key Features

High Power Output:
Mono crystalline28-cell module achieves a power output up to 40Wp.

PID RESISTANT:
SunMaster modules pass PID test, limited power degradation by PID test is guaranteed for mass production.

Low-light Performance:
Advanced glass and surface texturing allow for excellent performance in low-light environments.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Durability against extreme environmental conditions:
With high salt mist and ammonia resistance

Temperature Coefficient:
Improved temperature coefficient decreases power loss during high temperatures.

ELECTRICAL DATA (STC)*

Module type	SM330M	SM350M	SM360M	SM380M
Nominal power watt Pmax(W)	330W	350W	360W	380W
Power output tolerance Pmax(%)	0~+5%			
Maximum power voltage Vmp(V)	27.8V	28.8V	29.2V	31.3V
Maximum power current Imp(A)	11.88A	12.16A	12.33A	12.15A
Open circuit Voltage Voc(V)	34.8V	35.2V	38.3V	38.3V
Short circuit current Ioc(A)	12.32A	12.90A	12.22A	12.89A
Module efficiency(%)	18.9%	20.4%	20.6%	20.4%
Module dimension	1540x1134x30mm	1540x1134x30mm	1540x1134x30mm	1722x1134x30mm
Solar cells	Mono 182x91			
Cells orientation	96(6x16)	96(6x16)	96(6x16)	108(6x18)
Weight	16.7kg±5%	16.7kg±5%	16.7kg±5%	18.7kg±5%

*STC(Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

ELECTRICAL DATA NOCT *

Maximum power pmax(Wp)	244W	259W	266.4W	281.2W
Maximum power point voltage Vmp(V)	24.8V	25.8V	26.2V	28.3V
Maximum power point current Imp(A)	9.83A	10.04A	10.16A	9.93A
Open circuit Voltage Voc(V)	31.8V	32.2V	35.3V	35.3V
Short circuit current Ioc(A)	9.97A	10.45A	9.82A	10.35A

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m2,Ambient Temperature 20℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

TEMPERATURE RATINGS

NOCT	43℃±2℃
Temperature coefficient of Pmax	-0.36%/K
Temperature coefficient of Voc	-0.28%/K
Temperature coefficient of Isc	0.05%/K

Mechanical Characteristics

Glass	High transparency, low iron, tempered
Junction box	IP 65
Connectors	MC4-compatible

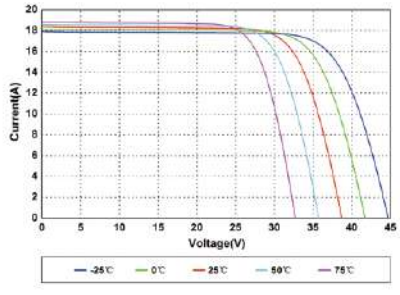
WORKING CONDITIONS

Maximum system voltage	1000 /1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	15A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

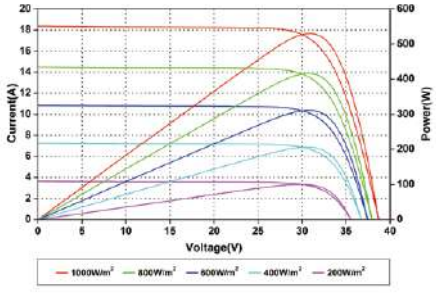
PACKAGING INFORMATION

Packing type	carton
Box	2pcs/box

PACKAGING INFORMATION



Current-Voltage and Power-Voltage Curves at Different Irradiances



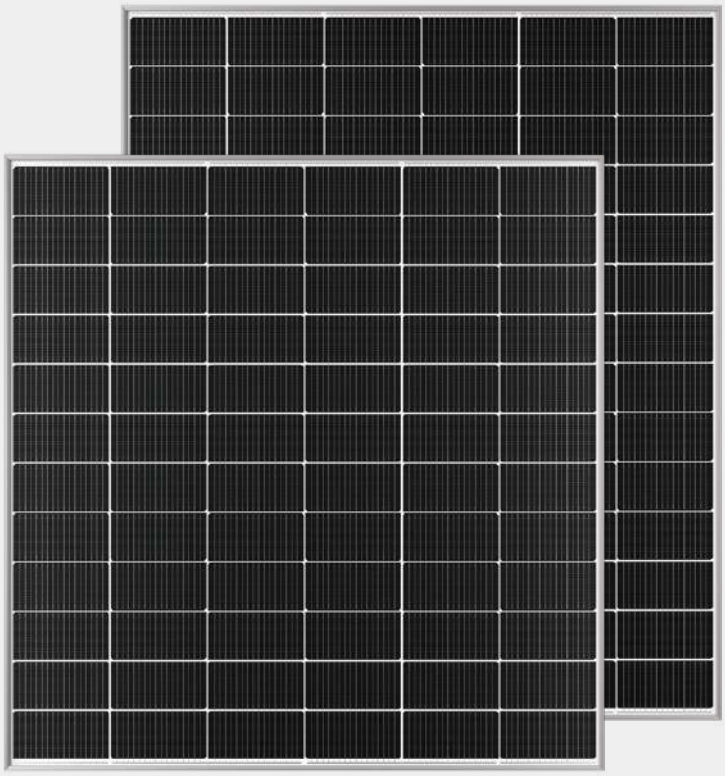
Current-Voltage Curves at Different Temperatures

Customized solar panels

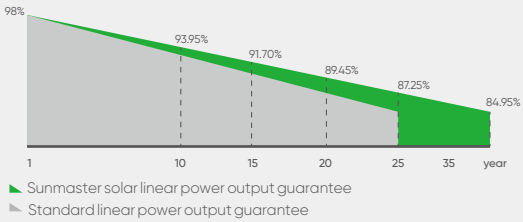
SunMaster 2

SM250-300M

182mm Cells Mono P-TYPE/N-TYPE with MBB & Half-cut Technology



Quality Guarantee



250-300W

-0.55% Power attenuation

30years Power warranty

Comprehensive Products and System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001-

2015/Quality management system

ISO 14001-

2015/Standards for environmental management system

ISO 45001-

2018/International standards for occupational health & safety

Key Features

High Power Output:
Mono crystalline28-cell module achieves a power output up to 40Wp.

PID RESISTANT:
SunMaster modules pass PID test, limited power degradation by PID test is guaranteed for mass production.

Low-light Performance:
Advanced glass and surface texturing allow for excellent performance in low-light environments.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Durability against extreme environmental conditions:
With high salt mist and ammonia resistance

Temperature Coefficient:
Improved temperature coefficient decreases power loss during high temperatures.

ELECTRICAL DATA (STC)*

Module type	SM250M	SM270M	SM280M	SM300M
Nominal power watt Pmax(W)	250W	270W	280W	300W
Power output tolerance Pmax(%)	0~+5%			
Maximum power voltage Vmp(V)	41.7V	41.7V	41.7V	24.3V
Maximum power current Imp(A)	6.0A	6.48A	6.72A	12.35A
Open circuit Voltage Voc(V)	47.1V	44.7V	44.7V	30.9V
Short circuit current Ioc(A)	7.21A	7.67A	7.95A	12.6A
Module efficiency(%)	19.0%	20.4%	21.2%	19.4%
Module dimension	1160x1134x30mm	1160x1134x30mm	1160x1134x30mm	1360x1134x30mm
Solar cells	Mono 182x91			
Cells orientation	72(6x12)	72(6x12)	72(6x12)	84(6x14)
Weight	12.6kg±5%	12.6kg±5%	12.6kg±5%	15kg±5%

*STC(Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

ELECTRICAL DATA NOCT *

Maximum power pmax(Wp)	186.5W	201.4W	201.4W	222W
Maximum power point voltage Vmp(V)	38.7V	38.7V	38.7V	21.3V
Maximum power point current Imp(A)	4.82A	5.2A	5.2A	10.4A
Open circuit Voltage Voc(V)	44.1V	41.7V	41.7V	27.9V
Short circuit current Ioc(A)	5.79A	6.27A	6.27A	10.5A

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m2,Ambient Temperature 20℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

TEMPERATURE RATINGS

NOCT	43℃±2℃
Temperature coefficient of Pmax	-0.36%/K
Temperature coefficient of Voc	-0.28%/K
Temperature coefficient of Isc	0.05%/K

Mechanical Characteristics

Glass	High transparency, low iron, tempered
Junction box	IP 65
Connectors	MC4-compatible

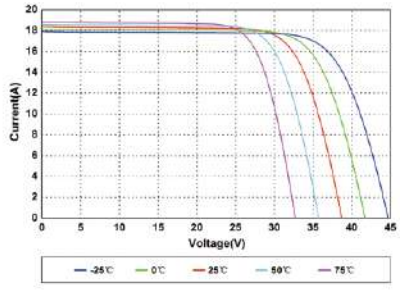
WORKING CONDITIONS

Maximum system voltage	1000 /1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	15A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

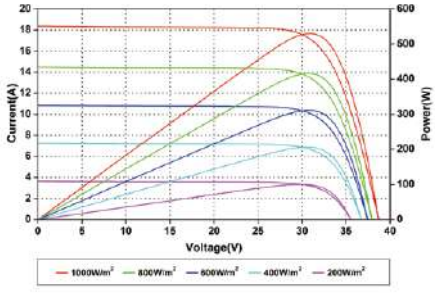
PACKAGING INFORMATION

Packing type	carton
Box	2pcs/box

PACKAGING INFORMATION



Current-Voltage and Power-Voltage Curves at Different Irradiances



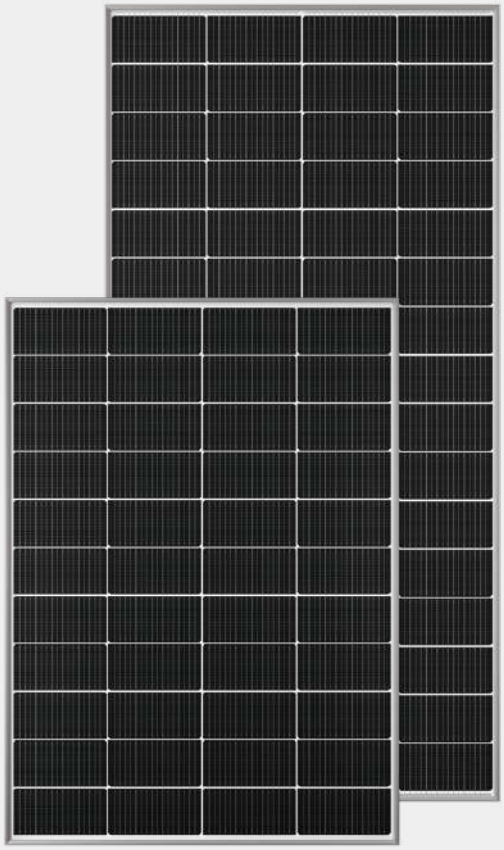
Current-Voltage Curves at Different Temperatures

Customized solar panels

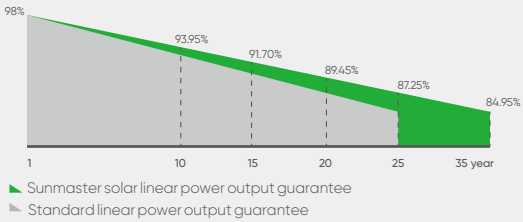
SunMaster 3

SM160-240M

182mm Cells Mono P-TYPE/N-TYPE with MBB & Half-cut Technology



Quality Guarantee



160-240W

-0.55%
Power attenuation

30years
Power warranty

Comprehensive Products and System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001-

2015/Quality management system

ISO 14001-

2015/Standards for environmental management system

ISO 45001-

2018/International standards for occupational health & safety

Key Features

High Power Output:
Mono crystalline28-cell module achieves a power output up to 40Wp.

PID RESISTANT:
SunMaster modules pass PID test, limited power degradation by PID test is guaranteed for mass production.

Low-light Performance:
Advanced glass and surface texturing allow for excellent performance in low-light environments.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Durability against extreme environmental conditions:
With high salt mist and ammonia resistance

Temperature Coefficient:
Improved temperature coefficient decreases power loss during high temperatures.

ELECTRICAL DATA (STC)*

Module type	SM160M	SM180M	SM200M	SM220M	SM240M
Nominal power watt Pmax(W)	160W	180W	200W	220W	240W
Power output tolerance Pmax(%)	0~+5%				
Maximum power voltage Vmp(V)	25.5V	27.8V	32.4V	32.4V	37.1V
Maximum power current Imp(A)	6.28A	6.48A	6.18A	6.49A	6.46A
Open circuit Voltage Voc(V)	28.5V	30.8V	35.4V	35.4V	44.2V
Short circuit current Ioc(A)	7.12A	7.42A	7.17A	7.53A	6.89A
Module efficiency(%)	19.7%	20.2%	19.5%	20.4%	20.5%
Module dimension	1070x760x30mm	1160x760x30mm	1350x760x30mm	1350x760x30mm	1535x760x30mm
Solar cells	Mono 182x91				
Cells orientation	44(4x11)	48(4x12)	56(4x14)	56(4x14)	64(4x16)
Weight	7.8kg±5%	8.5kg±5%	9.8kg±5%	9.8kg±5%	11.2kg±5%

*STC(Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

ELECTRICAL DATA NOCT *

Maximum power pmax(Wp)	118.4W	133.2W	148W	155.4W	177.6W
Maximum power point voltage Vmp(V)	22.5V	24.8V	29.4V	29.4V	34.1V
Maximum power point current Imp(A)	5.26A	5.37A	5.03A	5.29A	5.2A
Open circuit Voltage Voc(V)	25.5V	27.8V	32.4V	32.4V	41.2V
Short circuit current Ioc(A)	6.03A	8.44A	5.93A	6.23A	5.43A

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m2,Ambient Temperature 20℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

TEMPERATURE RATINGS

NOCT	43℃±2℃
Temperature coefficient of Pmax	-0.36%/K
Temperature coefficient of Voc	-0.28%/K
Temperature coefficient of Isc	0.05%/K

Mechanical Characteristics

Glass	High transparency, low iron, tempered
Junction box	IP 65
Connectors	MC4-compatible

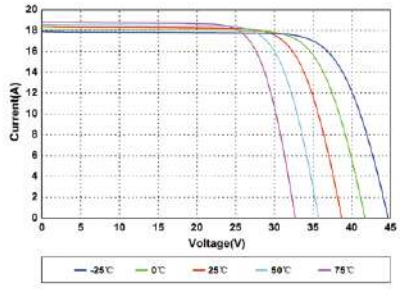
WORKING CONDITIONS

Maximum system voltage	1000 /1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	15A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

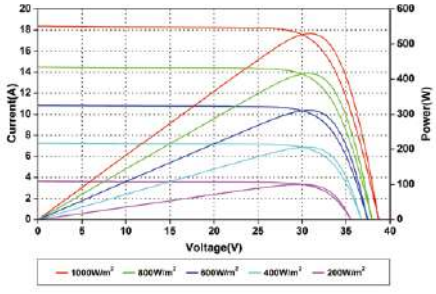
PACKAGING INFORMATION

Packing type	carton
Box	2pcs/box

PACKAGING INFORMATION



Current-Voltage and Power-Voltage Curves at Different Irradiances



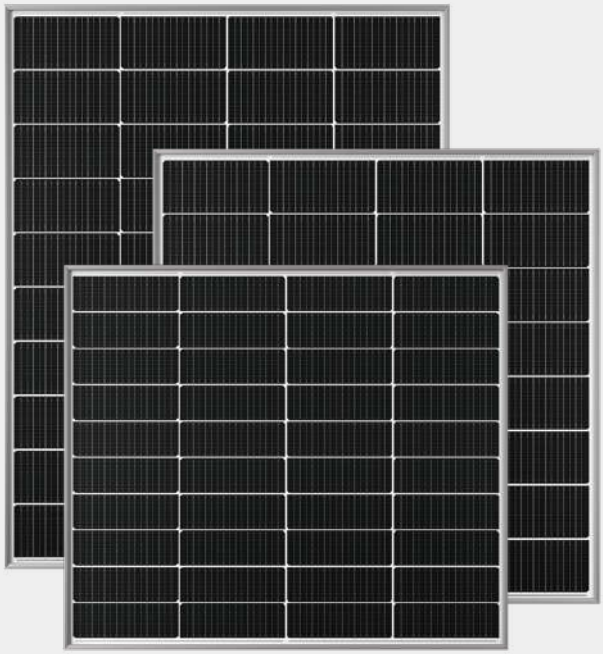
Current-Voltage Curves at Different Temperatures

Customized solar panels

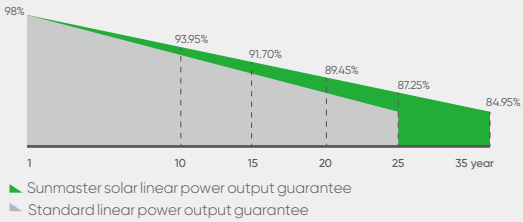
SunMaster 4

SM100-150M

182mm Cells Mono P-TYPE/N-TYPE with MBB & Half-cut Technology



Quality Guarantee



100-150W

-0.55% Power attenuation

30years Power warranty

Comprehensive Products and System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001-

2015/Quality management system

ISO 14001-

2015/Standards for environmental management system

ISO 45001-

2018/International standards for occupational health & safety

Key Features

High Power Output:
Mono crystalline28-cell module achieves a power output up to 40Wp.

PID RESISTANT:
SunMaster modules pass PID test, limited power degradation by PID test is guaranteed for mass production.

Low-light Performance:
Advanced glass and surface texturing allow for excellent performance in low-light environments.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Durability against extreme environmental conditions:
With high salt mist and ammonia resistance

Temperature Coefficient:
Improved temperature coefficient decreases power loss during high temperatures.

ELECTRICAL DATA (STC)*

Module type	SM100M	SM120M	SM150M
Nominal power watt Pmax(W)	100W	120W	150W
Power output tolerance Pmax(%)	0~+5%		
Maximum power voltage Vmp(V)	23.2V	18.5V	23.2V
Maximum power current Imp(A)	4.32A	6.48A	6.46A
Open circuit Voltage Voc(V)	26.2V	21.5V	26.2V
Short circuit current Ioc(A)	4.84A	7.08A	7.27A
Module efficiency(%)	19.3%	19.7%	20.1%
Module dimension	760x680x30mm	800x760x30mm	980x760x30mm
Solar cells	Mono 182x60.6	Mono 182x91	Mono 182x91
Cells orientation	40(4x10)	32(4x8)	40(4x10)
Weight	5.1kg±5%	5.8kg±5%	7.2kg±5%

*STC(Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

ELECTRICAL DATA NOCT *

Maximum power pmax(Wp)	74.6W	89.5W	111.9W
Maximum power point voltage Vmp(V)	20.2V	16.3V	20.2V
Maximum power point current Imp(A)	3.69A	5.5A	5.53A
Open circuit Voltage Voc(V)	23.2V	18.6V	23.2V
Short circuit current Ioc(A)	4.18A	6.39A	6.27A

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m2,Ambient Temperature 20℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

TEMPERATURE RATINGS

NOCT	43℃±2℃
Temperature coefficient of Pmax	-0.36%/K
Temperature coefficient of Voc	-0.28%/K
Temperature coefficient of Isc	0.05%/K

Mechanical Characteristics

Glass	High transparency, low iron, tempered
Junction box	IP 65
Connectors	MC4-compatible

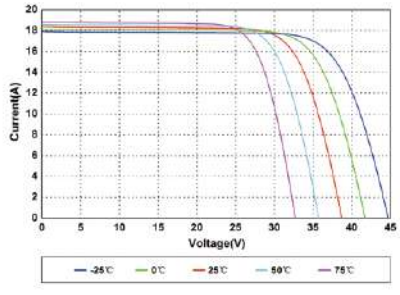
WORKING CONDITIONS

Maximum system voltage	1000 /1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	15A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

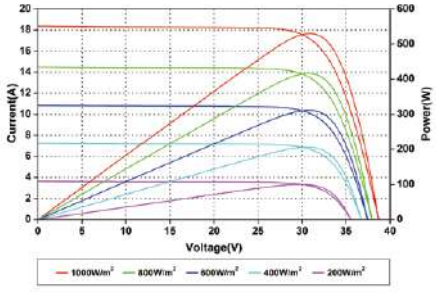
PACKAGING INFORMATION

Packing type	carton
Box	2pcs/box

PACKAGING INFORMATION



Current-Voltage and Power-Voltage Curves at Different Irradiances



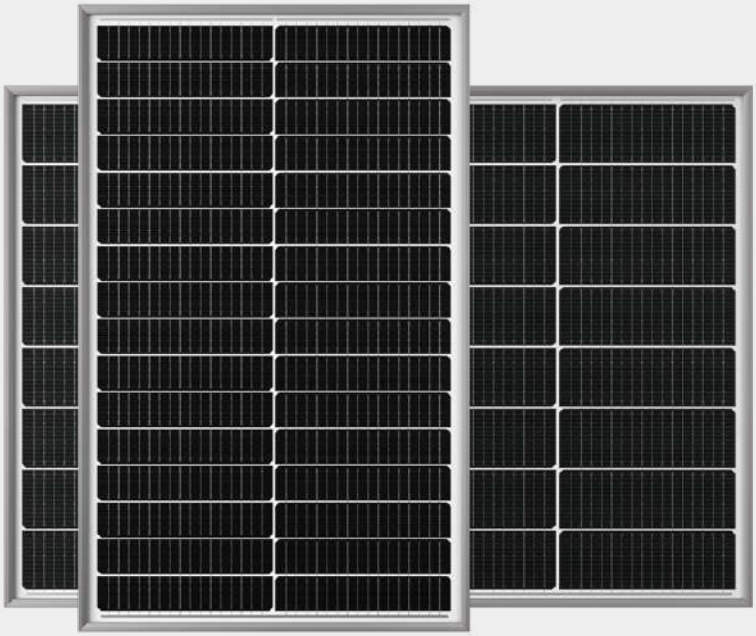
Current-Voltage Curves at Different Temperatures

Customized solar panels

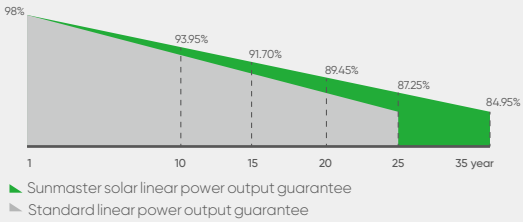
SunMaster 5

SM50-90M

182mm Cells Mono P-TYPE/N-TYPE with MBB & Half-cut Technology



Quality Guarantee



50-90W

-0.55%
Power attenuation

30years
Power warranty

Comprehensive Products and System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001-

2015/Quality management system

ISO 14001-

2015/Standards for environmental management system

ISO 45001-

2018/International standards for occupational health & safety

Key Features

High Power Output:
Mono crystalline28-cell module achieves a power output up to 40Wp.

PID RESISTANT:
SunMaster modules pass PID test, limited power degradation by PID test is guaranteed for mass production.

Low-light Performance:
Advanced glass and surface texturing allow for excellent performance in low-light environments.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Durability against extreme environmental conditions:
With high salt mist and ammonia resistance

Temperature Coefficient:
Improved temperature coefficient decreases power loss during high temperatures.

ELECTRICAL DATA (STC)*

Module type	SM50M	SM60M	SM70M	SM80M	SM90M
Nominal power watt Pmax(W)	50W	60W	70W	80W	90W
Power output tolerance Pmax(%)	0~+5%				
Maximum power voltage Vmp(V)	18.5V	18.5V	18.5V	18.5V	20.8V
Maximum power current Imp(A)	2.71A	3.25A	3.79A	4.32A	4.33A
Open circuit Voltage Voc(V)	21.5V	21.5V	21.5V	21.5V	23.8V
Short circuit current Ioc(A)	2.95A	3.54A	4.13A	4.72A	4.08A
Module efficiency(%)	18.6%	18.3%	17.0%	19.1%	19.4%
Module dimension	660x400x20mm	760x430x20mm	760x540x30mm	760x540x30mm	760x610x30mm
Solar cells	Mono 182x36.4	Mono 182x36.4	Mono 182x60.6	Mono 182x60.6	Mono 182x60.6
Cells orientation	32(2x16)	32(2x16)	32(4x8)	32(4x8)	36(4x9)
Weight	2.5kg±5%	3.2kg±5%	4kg±5%	4kg±5%	4.4kg±5%

*STC(Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

ELECTRICAL DATA NOCT *

Maximum power pmax(Wp)	37.3W	44.7W	51.8W	59.68W	66.6W
Maximum power point voltage Vmp(V)	15.5V	15.5V	15.5V	15.5V	17.8V
Maximum power point current Imp(A)	2.4A	2.8A	3.35A	3.85A	3.74A
Open circuit Voltage Voc(V)	19.4V	19.4V	18.5V	18.5V	20.8V
Short circuit current Ioc(A)	2.49A	2.99A	3.64A	4.19A	4.16A

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m2,Ambient Temperature 20℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

WORKING CONDITIONS

Maximum system voltage	750 V DC
Operating temperature	-40℃~+85℃
Maximum load(snow/wind)	5400 Pa / 2400 Pa

Mechanical Characteristics

Glass	High transparency, low iron, tempered

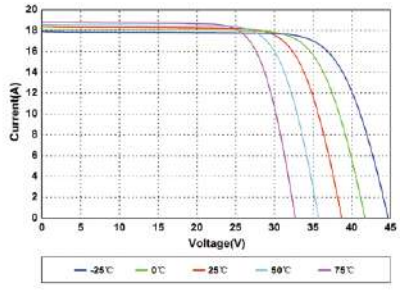
PACKAGING INFORMATION

Packing type	carton
Box	2pcs/box

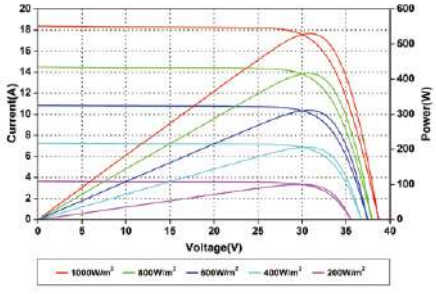
TEMPERATURE RATINGS

NOCT	43℃±2℃
Temperature coefficient of Pmax	-0.36%/K
Temperature coefficient of Voc	-0.28%/K
Temperature coefficient of Isc	0.05%/K

PACKAGING INFORMATION



Current-Voltage and Power-Voltage Curves at Different Irradiances



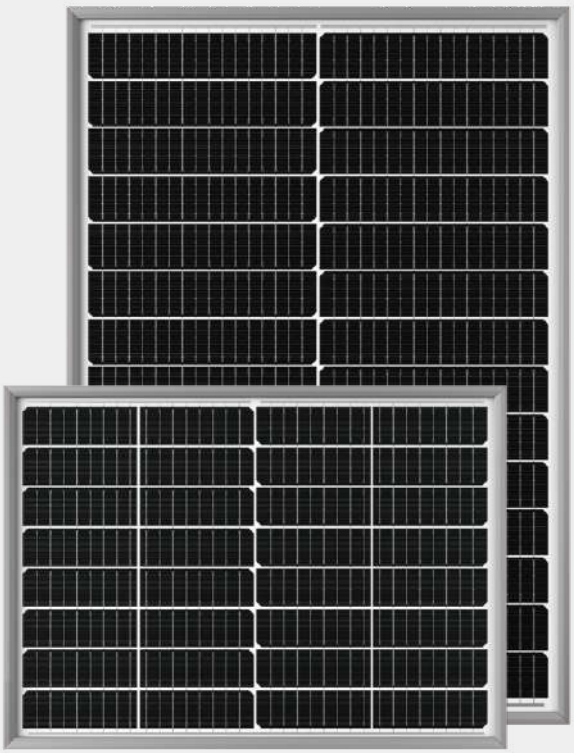
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Customized solar panels

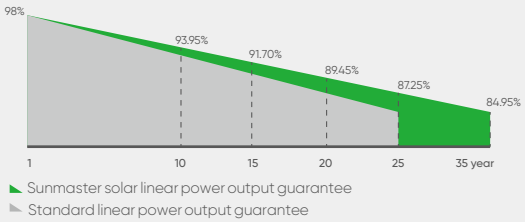
SunMaster 6

SM10-40M

182mm Cells Mono P-TYPE/N-TYPE with MBB & Half-cut Technology



Quality Guarantee



10-40W

-0.55%
Power attenuation

30years
Power warranty

Comprehensive Products and System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001-

2015/Quality management system

ISO 14001-

2015/Standards for environmental management system

ISO 45001-

2018/International standards for occupational health & safety

Key Features

High Power Output:
Mono crystalline28-cell module achieves a power output up to 40Wp.

PID RESISTANT:
SunMaster modules pass PID test, limited power degradation by PID test is guaranteed for mass production.

Low-light Performance:
Advanced glass and surface texturing allow for excellent performance in low-light environments.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Durability against extreme environmental conditions:
With high salt mist and ammonia resistance

Temperature Coefficient:
Improved temperature coefficient decreases power loss during high temperatures.

ELECTRICAL DATA (STC)*

Module type	SM10M	SM20M	SM30M	SM40M
Nominal power watt Pmax(W)	10W	20W	30W	40W
Power output tolerance Pmax(%)	0~+5%	0~+5%	0~+5%	0~+5%
Maximum power voltage Vmp(V)	18V	18.5V	18.1V	16.2V
Maximum power current Imp(A)	0.56A	1.09A	1.1A	2.47A
Open circuit Voltage Voc(V)	21V	22.5V	22.5V	19.2V
Short circuit current Ioc(A)	0.59A	1.13A	1.9A	2.75A
Module efficiency(%)	16.7%	16.7%	17.4%	16.9%
Module dimension	260x240x17mm	400x300x17mm	420x400x17mm	590x400x17mm
Solar cells	Mono 45.5x23.3	Mono 91x30.3	Mono 91x45.5	Mono 182x36.4
Cells orientation	36(4x9)	32(4x8)	32(4x8)	28(2x14)
Weight	0.5kg±5%	1.1kg±5%	1.3kg±5%	2.2kg±5%

*STC(Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃,AM 1.5
*The data above is for reference only and the actual data is in accordance with the practical testing

ELECTRICAL DATA NOCT *

Maximum power pmax(Wp)	7.4W	14.9W	22.4W	29.8W
Maximum power point voltage Vmp(V)	15V	15.5V	16.1V	13.2V
Maximum power point current Imp(A)	0.49A	0.93A	1.4A	2.25A
Open circuit Voltage Voc(V)	18V	18.7V	19.4V	16.2V
Short circuit current Ioc(A)	0.52A	1.06A	1.46A	2.33A

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m2,Ambient Temperature 20℃,AM 1.5
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WORKING CONDITIONS

Maximum system voltage	750 V DC
Operating temperature	-40℃~+85℃
Maximum load(snow/wind)	5400 Pa / 2400 Pa

PACKAGING INFORMATION

Packing type	carton
Box	2pcs/box

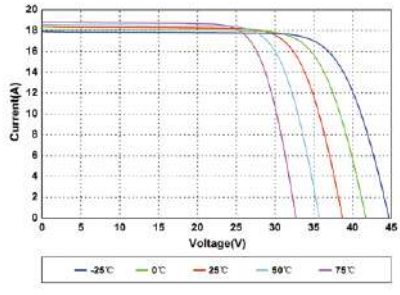
Mechanical Characteristics

Glass	High transparency, low iron, tempered

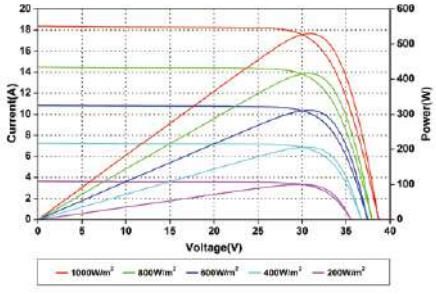
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Temperature coefficient of Pmax	-0.36%/K
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PACKAGING INFORMATION



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures