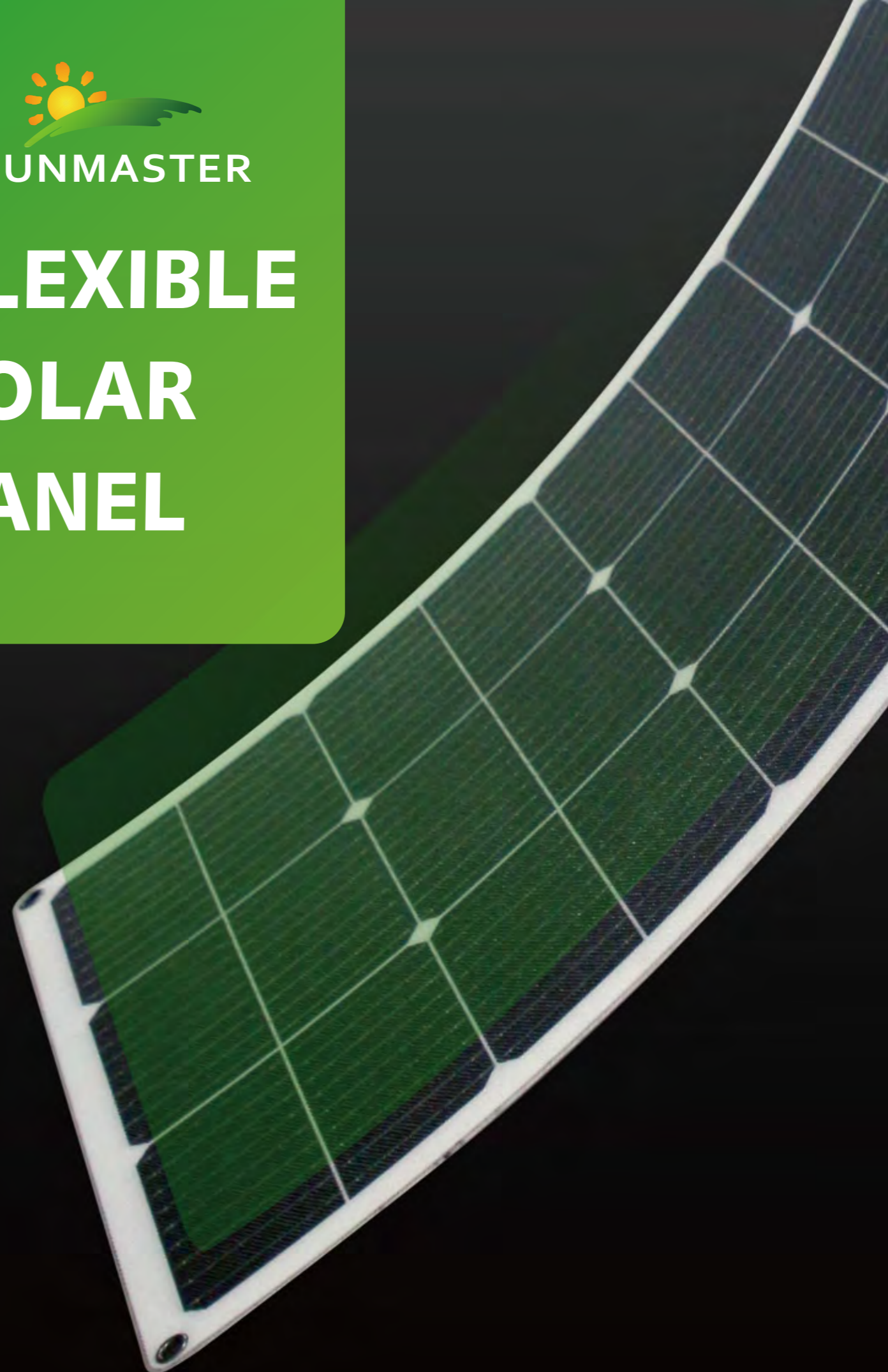




SUNMASTER

FLEXIBLE SOLAR PANEL

More
+ Power
Less Expense



SunMaster Solar Co., Ltd

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Mob: +86 139 6796 1680

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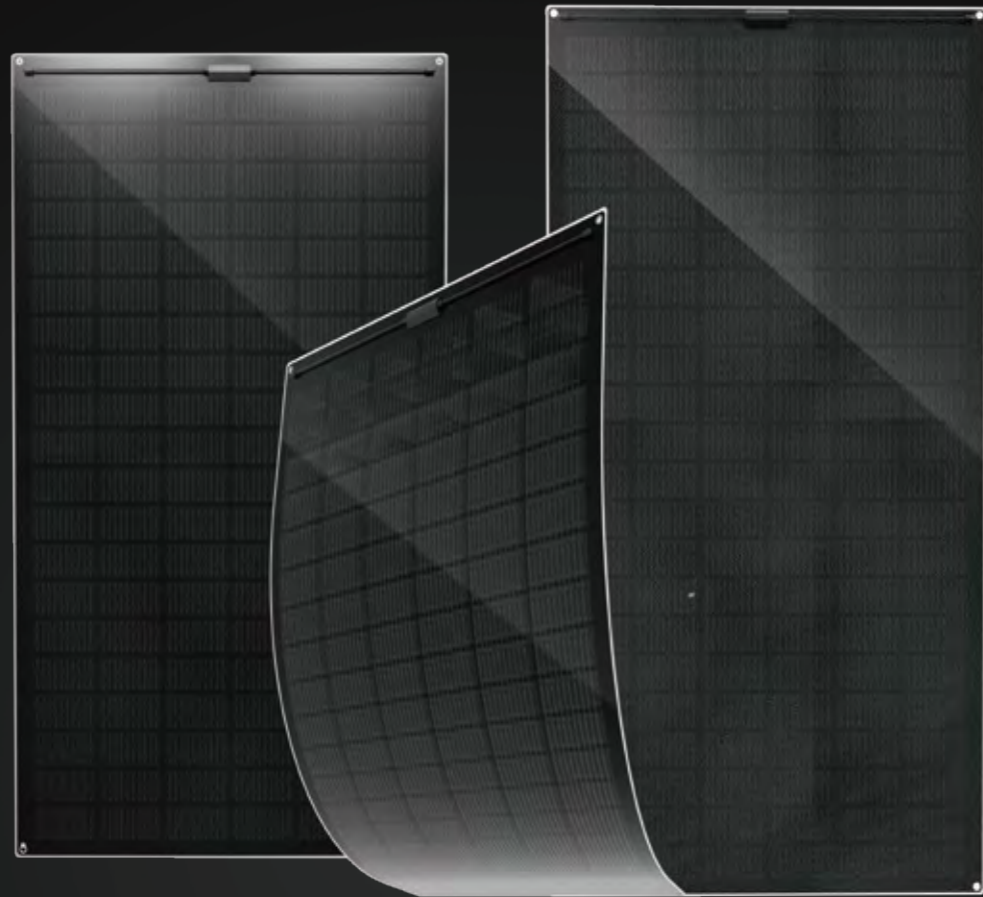
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Mail: info@chinasunmaster.com

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EFX FLEXIBLE Solar panels



SUNMASTER FLEXIBLE - Panelseries
65 W • 100 W • 125 W-HV • 160 W-HV
210 W-HV • 350 W-HV W-HV

Easy and Low Cost Installation. The panel can be installed with adhesives and/or use of stainless steel grommets in the panel. Warranty: 5 years limited power warranty of 80% of the minimum specified power rating.

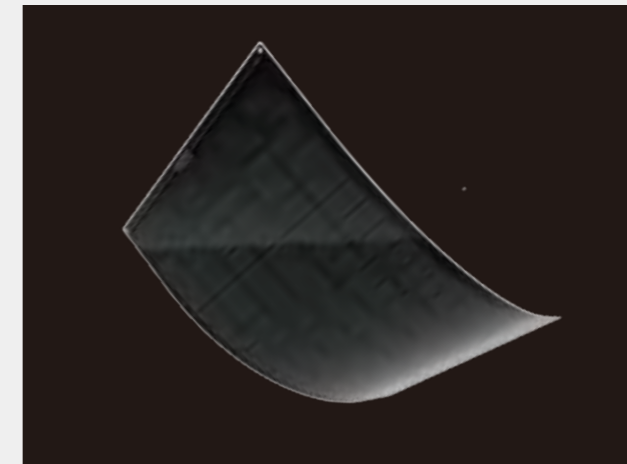
Semi-flexible premium solar panel with integrated aluminum plate and innovative solar cells guarantee exceptional stability and highest yields in the marine and caravan sector.

- Solar Panel with high performance solar cells
- Optimum energy yield even in diffuse light conditions
- Higher stability thanks to integrated aluminum plate
- Surface coating made of ETFE with high durability
- 80% less weight than conventionally framed glass modules
- High efficiency of over 20%



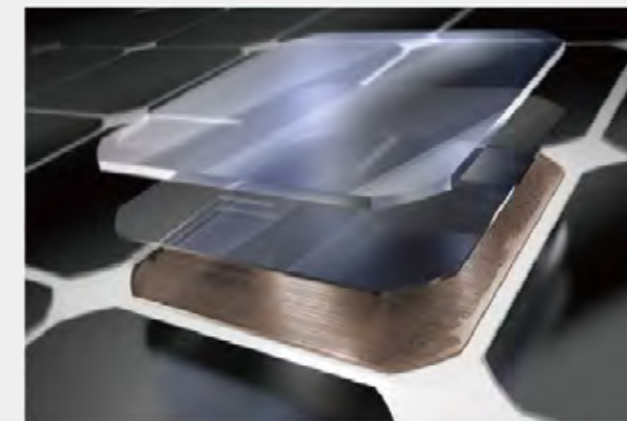
High Power and Flexible

Made with SunMaster's highest power Gen II back contact cells, SunMaster's flexible panels deliver the highest power output and the highest charging capacity in their product class. SunMaster's panels are constructed with top-grade, light-weight polymer materials, allowing for easy transport, installation and panel flexing up to 30 degrees.



Designed for Toughness

The SunMaster Maxeon® Solar Cell is the only cell built on a solid copper foundation. Flexible panels made with SunMaster cells are resistant to power loss via cracking and corrosion, unlike conventional cells, which are much more likely to lose power when bent or subjected to a moist environment. SunMaster flexible panels are the #1 choice for customers due to the combination of high power and cell ruggedness.



Easy and Low Cost Installation

The panel can be installed with adhesives and/or use of stainless steel grommets in the panel. The panels have standard quick-connect cables. An easy-to-follow installation guide is provided with each panel. Warranty: 5 years limited power warranty of 80% of the minimum specified power rating.

High Power and Flexible

These light weight, thin rigid and lexible solar panels are a fantastic way to ensure you are topped up with electricity without having the burden of a large standard solar panels.

These panels are lower voltage than a standard solar module and are ideal for smaller projects.

Available in 10W to 160W, our low voltage solar panels can be easily atached to wide variety of mouning surfaces. The waterproof junction box and MC4 connectors allow for simple con- necions to solar charge controllers ensuring that maximum collecion of energy.

Flexible Solar Panels



Rigid Solar Panels



Standard Features

- Using monocrystalline or polycrystalline cells with eiciency between 15 to 18%.
- Waterproof conecion box
- Custom sizes and mouning opions available
- Ready to charge any size batery bank
- Highly resistant to saline environments and wet weather

Applications:

RV, Golf Car, Patrol Car, Signaling System, Water Pumping Systems, Travel Tourism Car, Yacht, Roof Power generaion, Backpack, Tents.

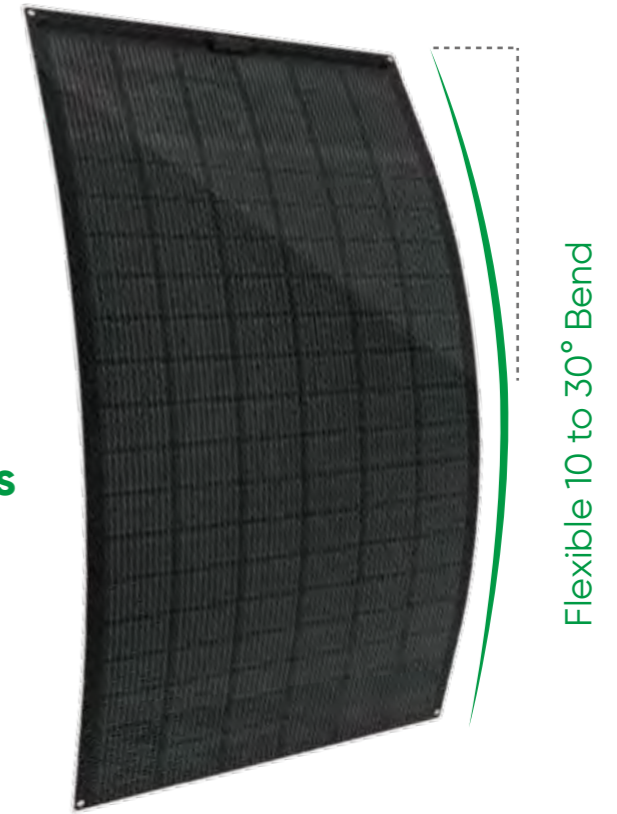
Warranty: 25 Year Power Output
10 Years Materials and Workmanship

Flexible Panel Features

- Bend rate from 10-30 degree.
- Ultra sot, very light and 3mm thin
- Custom sizes available

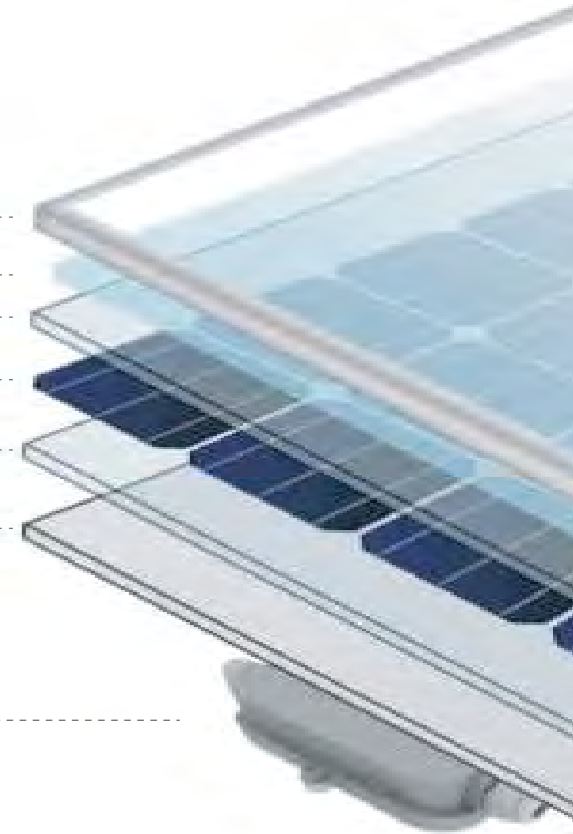
Flexible Panel Mouning Opions

- DIY Silicon Ready
- Double sided tape / velcro
- Grommet Holes
- Custom mouning opions



Flexible Panel Mouning Opions

- 1 Annodized Aluminum frame
- 2 Highly transparent tempered glass
- 3 EVA encapsulant material
- 4 PV Solar Cells
- 5 EVA encapsulant material
- 6 Insulaing Back Sheet
- 7 Juncion Box

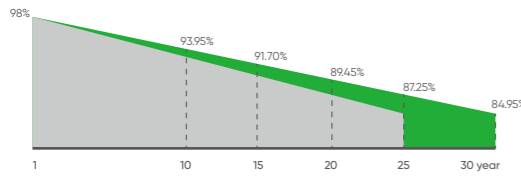


SM50-100W FX

50-100W Monocrystalline high-efficiency cell flexible PV module



Quality Guarantee



▲ Sunmaster solar linear power output guarantee
▬ Standard linear power output guarantee

50-100W 21.5-23.9%

Module conversion efficiency

Product characteristics



Lightweight and ultra-thin design

The component weight is as light as 3.12kg in weight and as thin as 3mm, meeting the requirements of various low load projects.



Customization

Products can be customized to meet the needs of different application scenarios



Ultra high flexibility

With ultra-thin silicon chip and advanced organic polymer materials, the component can perfectly fit various curved roofs.



Easy installation

Due to convenience and quickness, the costs of installation and transport are greatly reduced.



Efficient and reliable

It is improving the battery conversion efficiency. The power generation performance is excellent under low light conditions.



Plumbum free environmental protection

Base on the concept of green environmental protection, the production process and materials achieve plumbum free

Long lasting and stable quality

- Through various long-term reliability tests
- ISO 9001, ISO 14001 and ISO 45001
- The reliability of components is effectively ensured under EL test before and after lamination.
- Fully automatic production line and the leading photovoltaic technology

Electrical Performance Parameter(STC)

Parameter Name	Unit	SMFX-50	SMFX-100
Maximum power (Pm)	W	50W	100W
Power Deviation	W	0~+5w	0~+5w
Optimal working voltage (Vm)	V	18	18
Optimal working current (Im)	A	3.2	5.5
Open-circuit voltage (Voc)	V	19.3	19.8
Short-circuit current (Isc)	A	2.6	5.05

STC:AM=1.5, Irradiance1000W/㎡, Operating Temperature:25℃

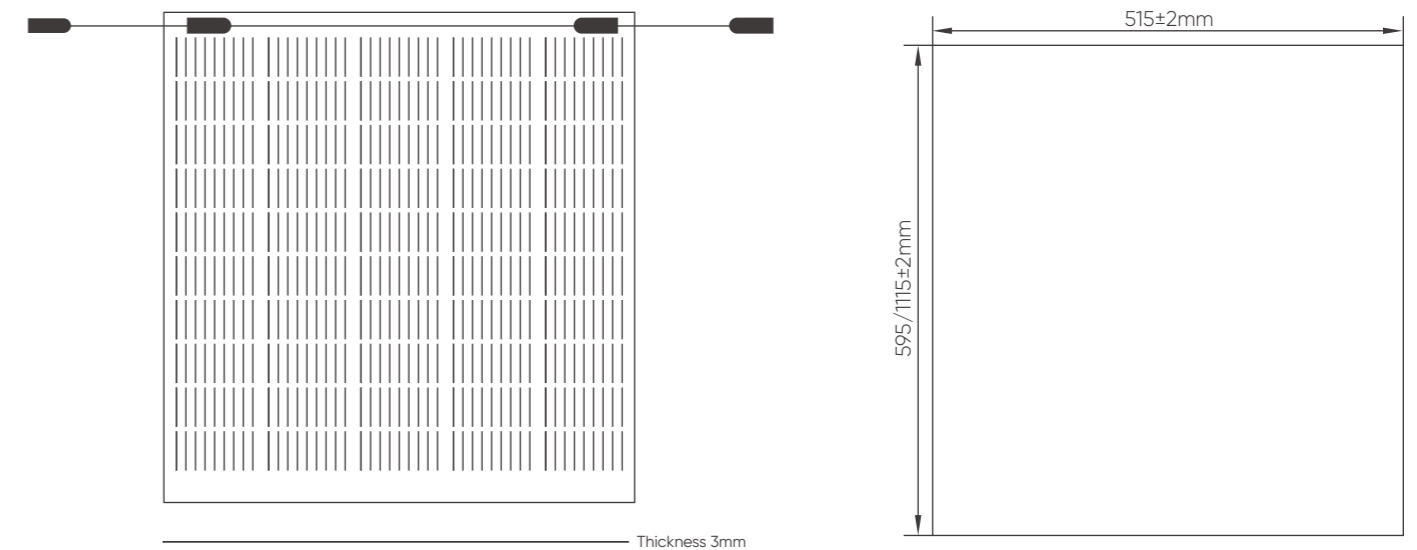
Mechanical

Cell array	11 (182/2) *5	Back board colour	Black and white
Size	595*515*2mm/1115*515*2mm	Terminal block	Protection grade IP67
Size of 46-piece box	1180*1680*1120mm	Cable	4mm ²
Front film	Lightweight high transparent polymer materials	Diode	2
Wind/snow pressure	2400mpa/5400mpa	Weight	0.9KG/1.5KG

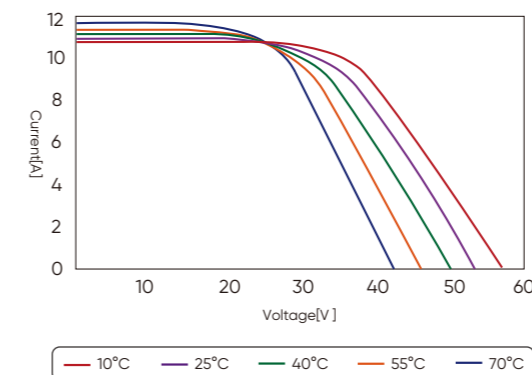
Temperature coefficient

Battery nominal operating temperature	25±2℃	The largest system voltage	DC1500V(IEC)
Current temperature coefficient (Isc)	+0.05%/℃	The largest fuse rated current	20A
Voltage temperature coefficient	-0.32%/℃	Operating temperature range	-40~+120℃
Power factor (Pm)	-0.40%/℃	Connector	MC Compatible

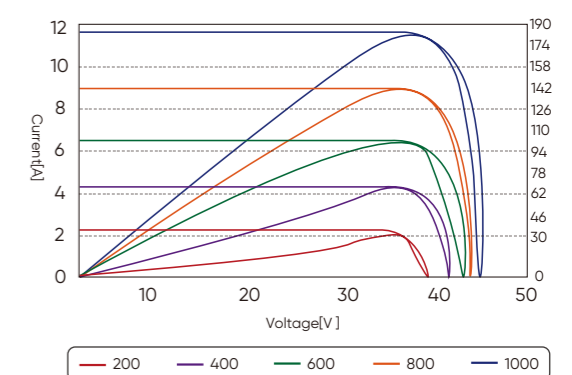
Dimension



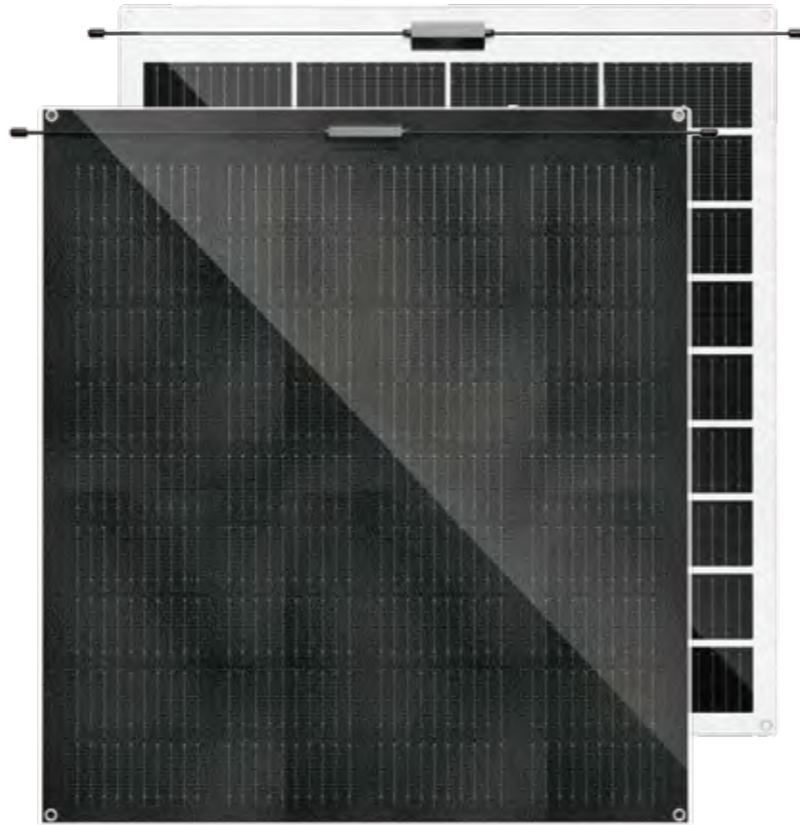
IV Curves



Temperature curves of current and voltage at different temperatures



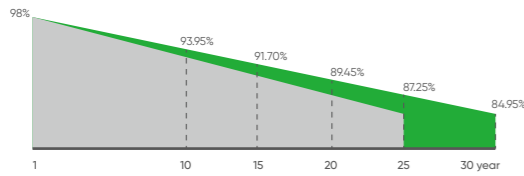
Curve of current and voltage/curve of power voltage under different irradiance



SM160-170W MFX

160-170W Monocrystalline high-efficiency cell flexible PV module

Quality Guarantee



▶ Sunmaster solar linear power output guarantee
▶ Standard linear power output guarantee

160-170W 21.5-23.9%

Module conversion efficiency

Product characteristics



Lightweight and ultra-thin design
The component weight is as light as 3.12kg in weight and as thin as 3mm, meeting the requirements of various low load projects.



Customization
Products can be customized to meet the needs of different application scenarios



Ultra high flexibility
With ultra-thin silicon chip and advanced organic polymer materials, the component can perfectly fit various curved roofs.



Easy installation
Due to convenience and quickness, the costs of installation and transport are greatly reduced.



Efficient and reliable
It is improving the battery conversion efficiency. The power generation performance is excellent under low light conditions.



Plumbum free environmental protection
Base on the concept of green environmental protection, the production process and materials achieve plumbum free

Long lasting and stable quality

- Through various long-term reliability tests
- ISO 9001, ISO 14001 and ISO 45001
- The reliability of components is effectively ensured under EL test before and after lamination.
- Fully automatic production line and the leading photovoltaic technology

Electrical Performance Parameter(STC)

Parameter Name	Unit	SMFX-160	SMFX-165	SMFX-170
Maximum power (Pm)	W	160W	165W	170W
Power Deviation	W	0~+5w	0~+5w	0~+5w
Optimal working voltage (Vm)	V	32.175	32.395	32.725
Optimal working current (Im)	A	5.155	5.21	5.305
Open-circuit voltage (Voc)	V	37.455	37.675	38.005
Short-circuit current (Isc)	A	5.52	5.52	5.57

STC:AM=1.5, Irradiance1000W/m², Operating Temperature:25 C

Mechanical

Cell array	11 (166/2) *5
Size	1000*900*3mm
Size of 46-piece box	1180*1680*1120mm
Front film	Lightweight high transparent polymer materials
Wind/snow pressure	2400mpa/5400mpa

Back board colour	Black and white
Terminal block	Protection grade IP67
Cable	4mm ²
Diode	2
Weight	3.12KG

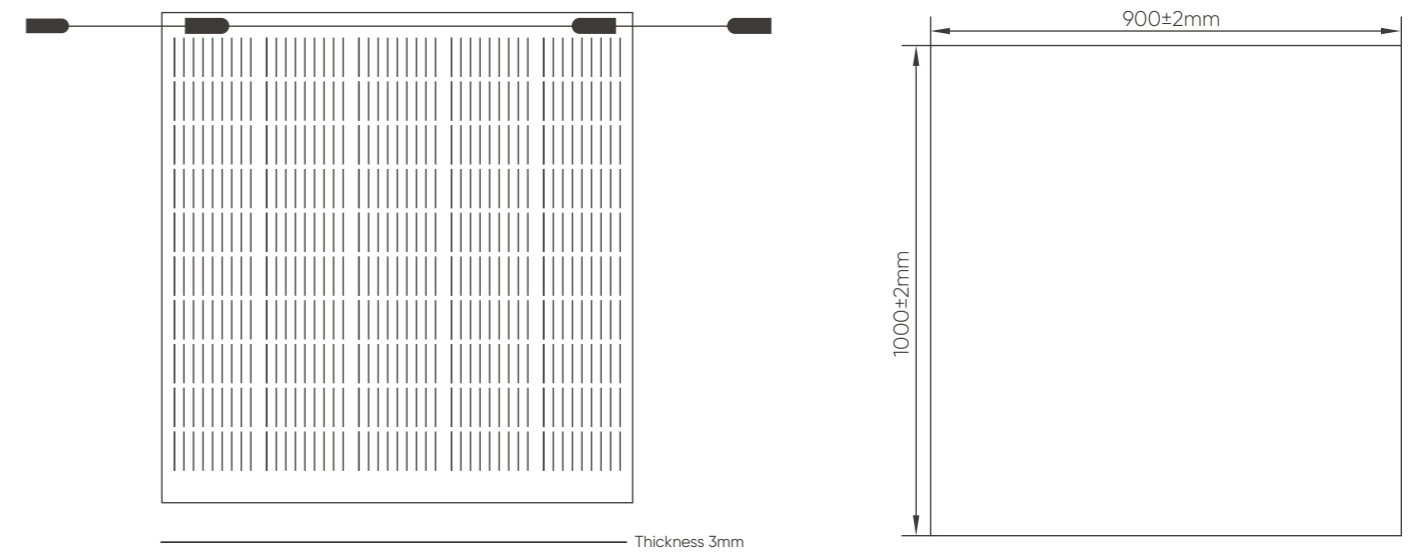
Temperature coefficient

Battery nominal operating temperature	25±2 C
Current temperature coefficient (Isc)	+0.05%/C
Voltage temperature coefficient	-0.32%/C
Power factor (Pm)	-0.40%/C

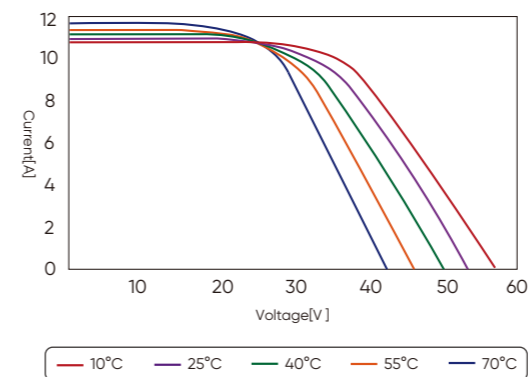
Working conditions

The largest system voltage	DC1500V(IEC)
The largest fuse rated current	20A
Operating temperature range	-40~+120 C
Connector	MC Compatible

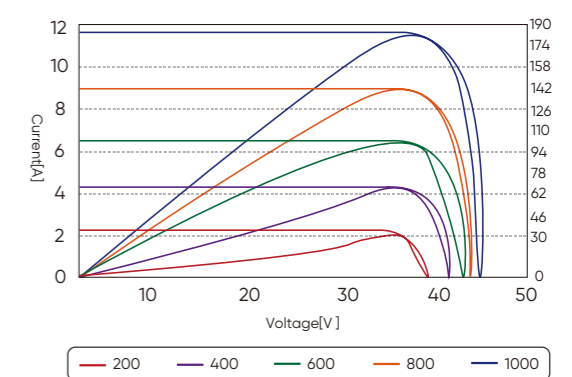
Dimension



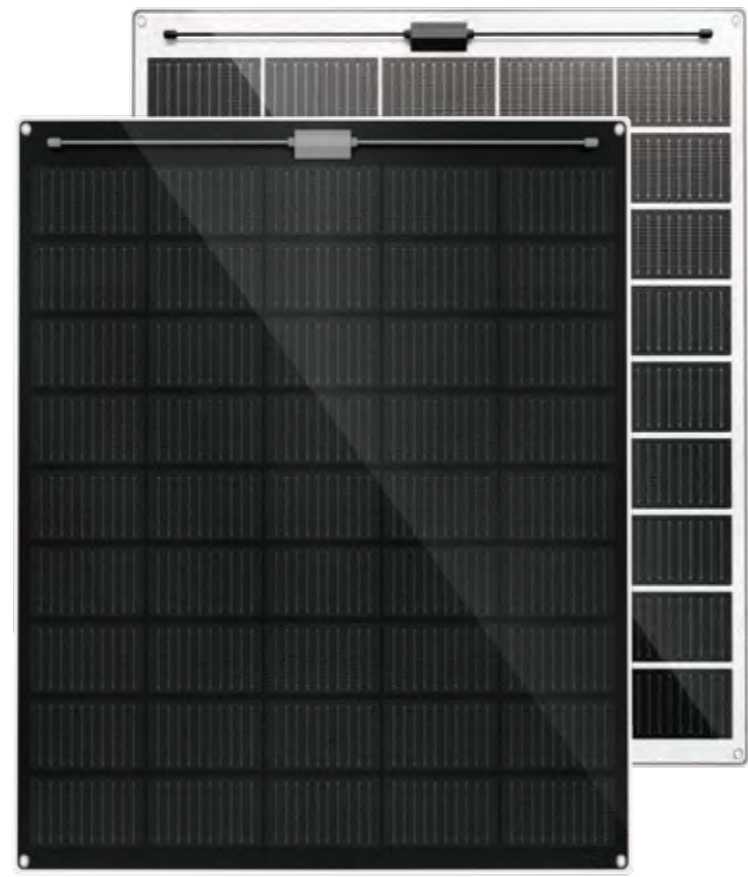
IV Curves



Temperature curves of current and voltage at different temperatures



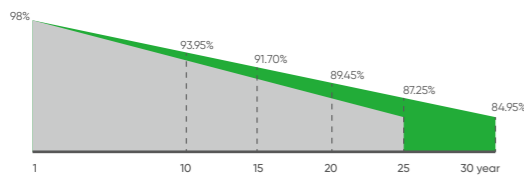
Curve of current and voltage/curve of power voltage under different irradiance



SM210-230W MFX

210-230W Monocrystalline high-efficiency cell flexible PV module

Quality Guarantee



▲ Sunmaster solar linear power output guarantee
▾ Standard linear power output guarantee

Electrical Performance Parameter(STC)

Parameter Name	Unit	SMFX-210	SMFX-215	SMFX-220	SMFX-225	SMFX-230
Maximum power (Pm)	W	210W	165W	170W	170W	170W
Power Deviation	W	0~+5w	0~+5w	0~+5w	0~+5w	0~+5w
Optimal working voltage (Vm)	V	42.12	42.48	42.84-46.8	47.52	48.456
Optimal working current (Im)	A	5.155	5.23	5.305-4.892	4.901	4.908
Open-circuit voltage (Voc)	V	37.455	37.675	49.752-53.568	53.712	53.856
Short-circuit current (Isc)	A	5.52	5.545	5.57-5.179	5.212	5.246

STC-AM=1.5, Irradiance1000W/㎡, Operating Temperature:25℃

Mechanical

Cell array	12 (166/2) *6
Size	1100*1040*3mm
Size of 46-piece box	1280*1680*1260mm
Front film	Lightweight high transparent polymer materials
Wind/snow pressure	2400mpa/5400mpa

Back board colour	Black and white
Terminal block	Protection grade IP67
Cable	4mm ²
Diode	3
Weight	3.8KG

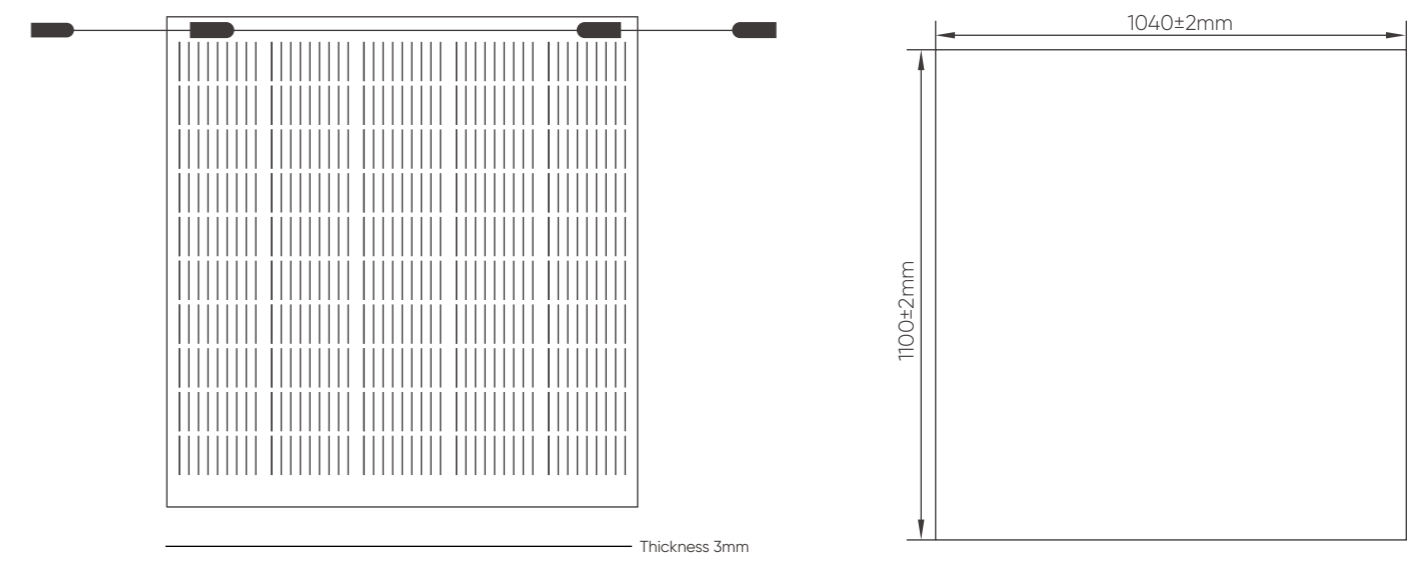
Temperature coefficient

Battery nominal operating temperature	25±2℃
Current temperature coefficient (Isc)	+0.05%/℃
Voltage temperature coefficient	-0.32%/℃
Power factor (Pm)	-0.40%/℃

Working conditions

The largest system voltage	DC1500V(IEC)
The largest fuse rated current	20A
Operating temperature range	-40~+120℃
Connector	MC Compatible

Dimension



210-230W 21.5-23.1%

Module conversion efficiency

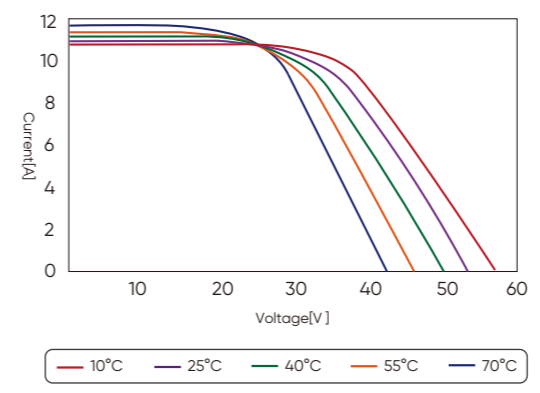
Product characteristics

- Lightweight and ultra-thin design**
 The component weight is as light as 3.12kg in weight and as thin as 3mm, meeting the requirements of various low load projects.
- Customization**
 Products can be customized to meet the needs of different application scenarios.
- Ultra high flexibility**
 With ultra-thin silicon chip and advanced organic polymer materials, the component can perfectly fit various curved roofs.
- Easy installation**
 Due to convenience and quickness, the costs of installation and transport are greatly reduced.
- Efficient and reliable**
 It is improving the battery conversion efficiency. The power generation performance is excellent under low light conditions.
- Plumbum free environmental protection**
 Base on the concept of green environmental protection, the production process and materials achieve plumbum free.

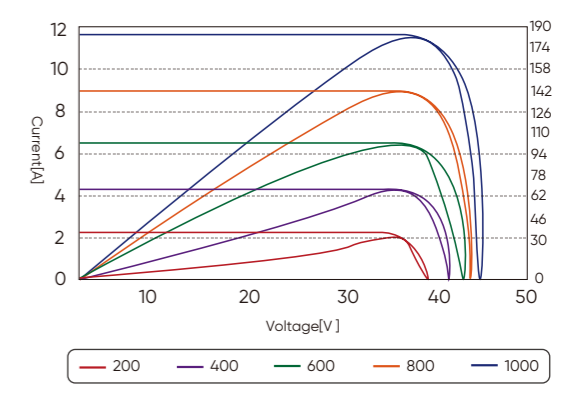
Long lasting and stable quality

- Through various long-term reliability tests
- ISO 9001, ISO 14001 and ISO 45001
- The reliability of components is effectively ensured under EL test before and after lamination.
- Fully automatic production line and the leading photovoltaic technology

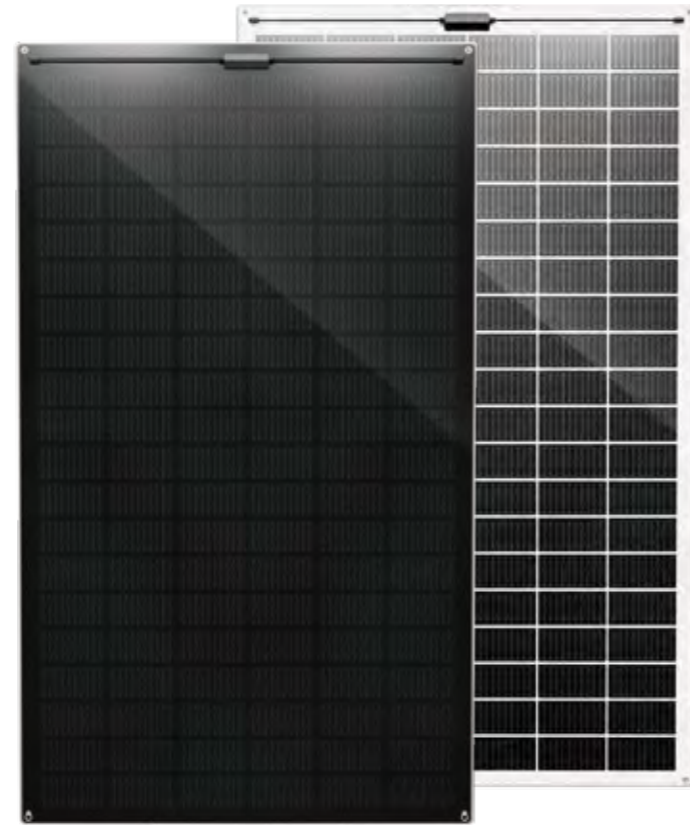
IV Curves



Temperature curves of current and voltage at different temperatures



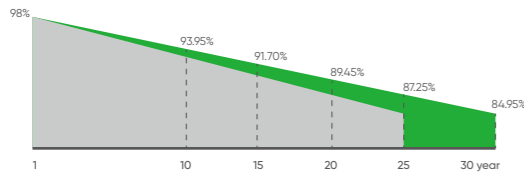
Curve of current and voltage/curve of power voltage under different irradiance



SM355-375W MFX

355-375W Monocrystalline high-efficiency cell flexible PV module

Quality Guarantee



▲ Sunmaster solar linear power output guarantee
▲ Standard linear power output guarantee

355-375W 21.5-23.1%

Module conversion efficiency

Product characteristics



Lightweight and ultra-thin design
The component weight is as light as 3.12kg in weight and as thin as 3mm, meeting the requirements of various low load projects.



Customization
Products can be customized to meet the needs of different application scenarios



Ultra high flexibility
With ultra-thin silicon chip and advanced organic polymer materials, the component can perfectly fit various curved roofs.



Easy installation
Due to convenience and quickness, the costs of installation and transport are greatly reduced.



Efficient and reliable
It is improving the battery conversion efficiency. The power generation performance is excellent under low light conditions.



Plumbum free environmental protection
Base on the concept of green environmental protection, the production process and materials achieve plumbum free

Long lasting and stable quality

- Through various long-term reliability tests
- ISO 9001, ISO 14001 and ISO 45001
- The reliability of components is effectively ensured under EL test before and after lamination.
- Fully automatic production line and the leading photovoltaic technology

Parameter Name	Unit	SMFX-355	SMFX-360	SMFX-365	SMFX-370	SMFX-375
Maximum power (Pm)	W	355W	360W	365W	370W	375W
Power Deviation	W	0~+5w	0~+5w	0~+5w	0~+5w	0~+5w
Optimal working voltage (Vm)	V	70.44	70.92	71.04	71.4	78.36
Optimal working current (Im)	A	5.155	5.23	5.255	5.305	4.892
Open-circuit voltage (Voc)	V	82.08	82.44	82.56	82.92	89.28
Short-circuit current (Isc)	A	5.52	5.545	5.545	5.57	5.179

STC:AM=1.5, Irradiance1000W/m², Operating Temperature:25 C

Mechanical

Cell array	20 (166/2) *6
Size	1780*1040*3mm
Size of 46-piece box	1960*1680*1260mm
Front film	Lightweight high transparent polymer materials
Wind/snow pressure	2400mpa/5400mpa

Back board colour	white
Terminal block	Protection grade IP67
Cable	4mm ²
Diode	3
Weight	5.85KG

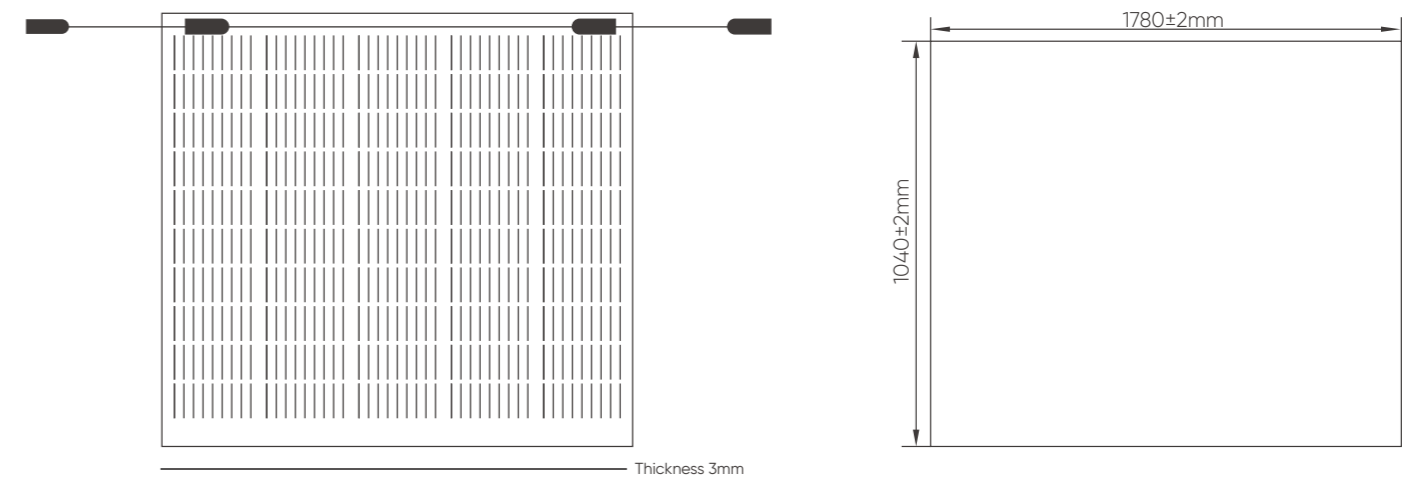
Temperature coefficient

Battery nominal operating temperature	25±2 C
Current temperature coefficient (Isc)	+0.05%/ C
Voltage temperature coefficient	-0.32%/ C
Power factor (Pm)	-0.40%/ C

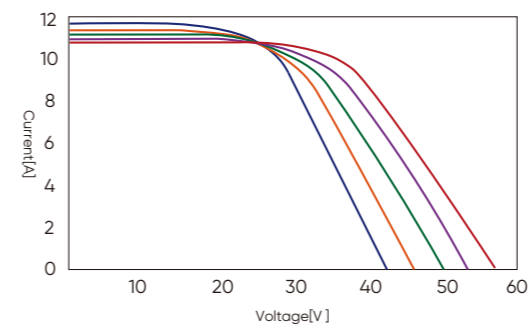
Working conditions

The largest system voltage	DC1500V(IEC)
The largest fuse rated current	20A
Operating temperature range	-40~+120 C
Connector	MC Compatible

Dimension

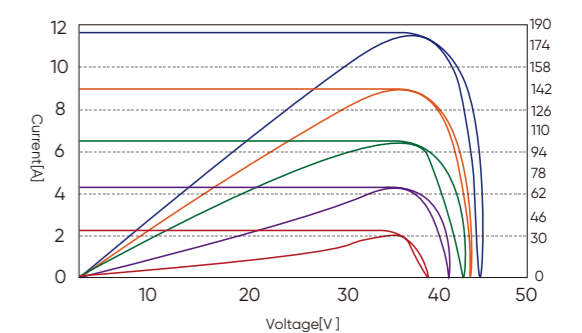


IV Curves



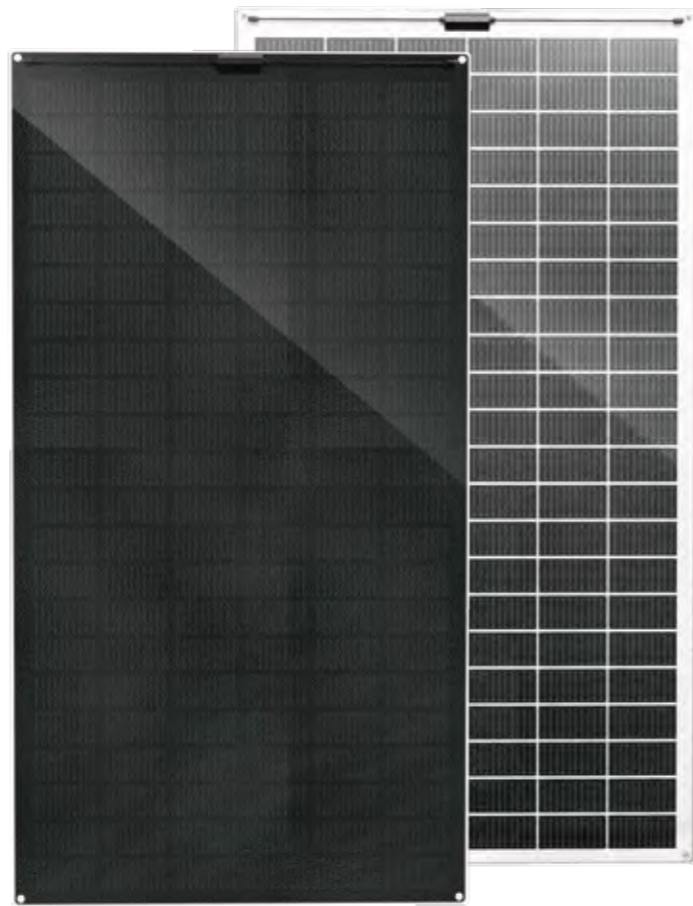
10°C 25°C 40°C 55°C 70°C

Temperature curves of current and voltage at different temperatures



200 400 600 800 1000

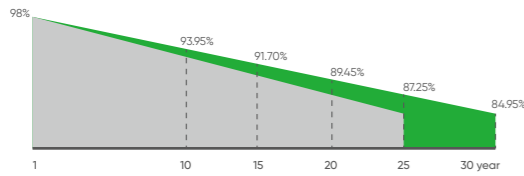
Curve of current and voltage/curve of power voltage under different irradiance



SM390-410W MFX

390-410W Monocrystalline high-efficiency cell flexible PV module

Quality Guarantee



■ Sunmaster solar linear power output guarantee
■ Standard linear power output guarantee

390-410W 21.5-23.8%

Module conversion efficiency

Product characteristics



Lightweight and ultra-thin design
The component weight is as light as 3.12kg in weight and as thin as 3mm, meeting the requirements of various low load projects.



Customization
Products can be customized to meet the needs of different application scenarios



Ultra high flexibility
With ultra-thin silicon chip and advanced organic polymer materials, the component can perfectly fit various curved roofs.



Easy installation
Due to convenience and quickness, the costs of installation and transport are greatly reduced.



Efficient and reliable
It is improving the battery conversion efficiency. The power generation performance is excellent under low light conditions.



Plumbum free environmental protection
Base on the concept of green environmental protection, the production process and materials achieve plumbum free

Long lasting and stable quality

- Through various long-term reliability tests
- ISO 9001, ISO 14001 and ISO 45001
- The reliability of components is effectively ensured under EL test before and after lamination.
- Fully automatic production line and the leading photovoltaic technology

Electrical Performance Parameter(STC)

Parameter Name	Unit	SMFX-390	SMFX-395	SMFX-400	SMFX-405	SMFX-410
Maximum power (Pm)	W	390W	395W	400W	405W	410W
Power Deviation	W	0~+5w	0~+5w	0~+5w	0~+5w	0~+5w
Optimal working voltage (Vm)	V	77.22	77.616	78.012	78.408	86.196
Optimal working current (Im)	A	5.155	5.23	5.255	5.305	4.892
Open-circuit voltage (Voc)	V	89.892	90.288	90.684	91.08	98.208
Short-circuit current (Isc)	A	5.52	5.545	5.545	5.57	5.179

STC:AM=1.5, Irradiance1000W/㎡, Operating Temperature:25 C

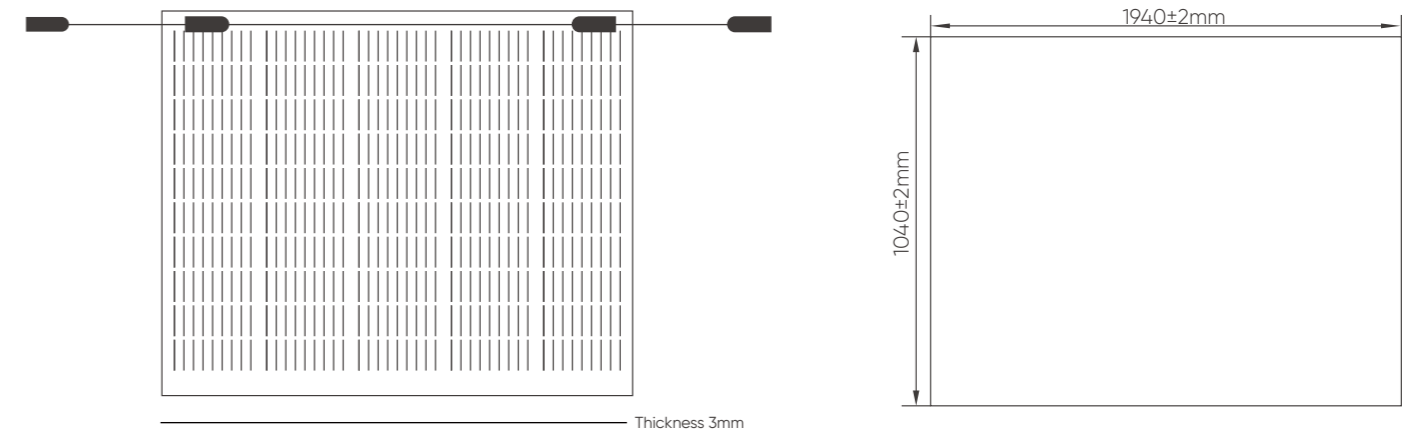
Mechanical

Cell array	22 (166/2) *6	Back board colour	white
Size	1940*1040*3mm	Terminal block	Protection grade IP67
Size of 46-piece box	2120*1680*1260mm	Cable	4mm ²
Front film	Lightweight high transparent polymer materials	Diode	2
Wind/snow pressure	2400mpa/5400mpa	Weight	6.4KG

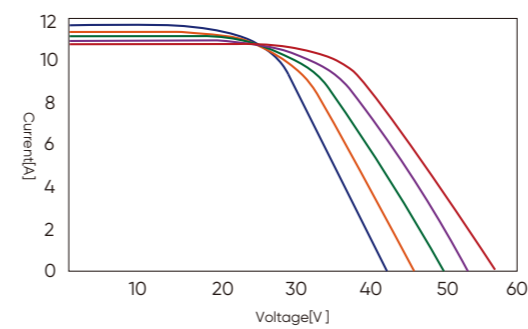
Temperature coefficient

Battery nominal operating temperature	25±2 C	The largest system voltage	DC1500V(IEC)
Current temperature coefficient (Isc)	+0.05%/C	The largest fuse rated current	20A
Voltage temperature coefficient	-0.32%/C	Operating temperature range	-40~+120 C
Power factor (Pm)	-0.40%/C	Connector	MC Compatible

Dimension

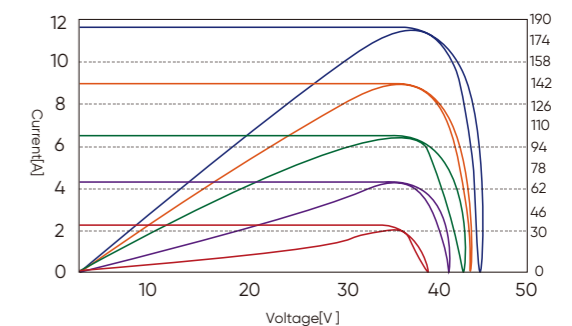


IV Curves



10°C 25°C 40°C 55°C 70°C

Temperature curves of current and voltage at different temperatures



200 400 600 800 1000

Curve of current and voltage/curve of power voltage under different irradiance

NEW Flexible Solar Panels from SUNMASTER

pleased to introduce a new range of semi-flexible solar panels direct from the leading solar panel manufacturer SunMaster®.

These panels incorporate SunMaster's worldbeating other "back contact" solar cells that deliver up to 25% efficiency.

That means faster charging and more power delivered from less panel area which is ideal on board.

