

SF-M18/G120

445-460W

182*91mm cells 60

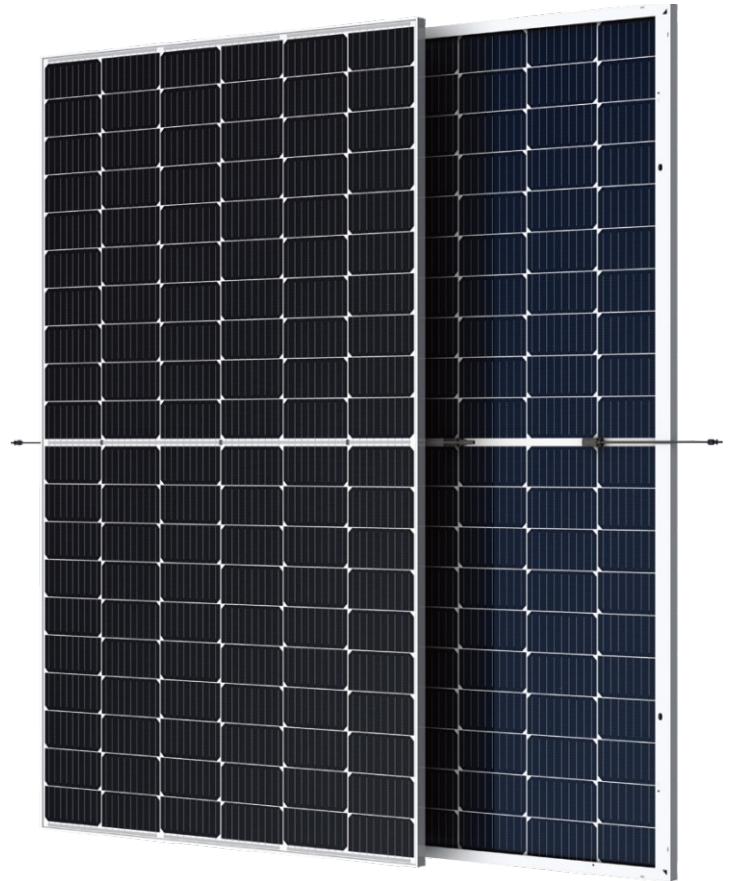
Bifacial Double Glass

PERC half-cell module

Max Power out:460W

Max Efficiency:21.28%

Power tolerance:0~+5W



SMBB Technology

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



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



HOT 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.



Enhanced Mechanical Load

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

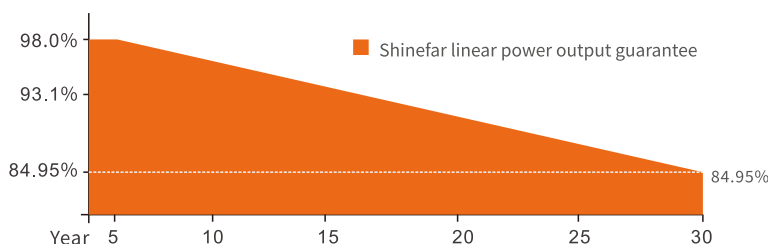


High energy generation, low LCOE

Low Pmax temp coefficient (-0.36%) increases energy production

Superior Warranty

- 15-year material&technology warranty
- 30-year linear power output warranty

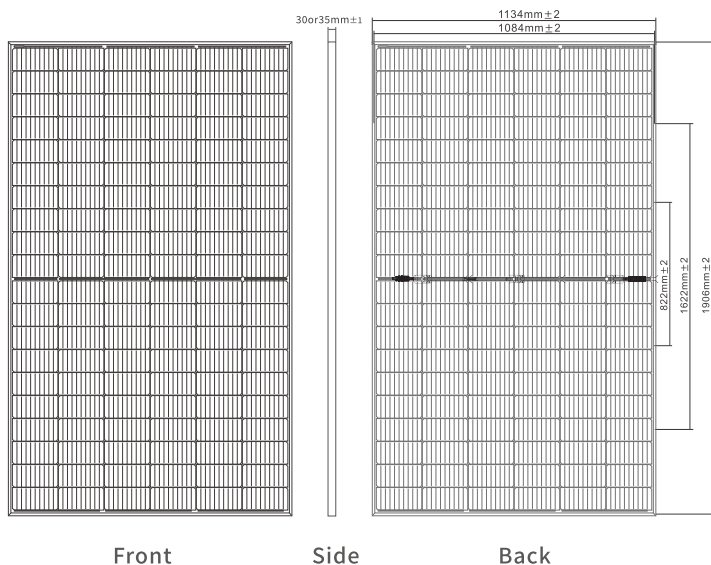


Comprehensive Products and System Certificates

- IEC 61215, IEC 61730, IEC 61701, IEC 62716
- ISO 9001:2015 Quality management systems
- ISO 14001:2015 Environmental management systems
- ISO 45001:2018 Occupational health and safety management systems



Engineering Drawings



Structural parameter

Dimensions of Module	1906x1134x30mm or 1906x1134x35mm
Weight	26.5kg
packing	37/31/pallet,888/744/40hq
Front Glass	High Transparency Solar Glass 2.0mm
Back Glass	Heat Strengthened Glass 2.0mm
Frame	Silver, anodized aluminium alloy
J-Box	IP68 Rated
Cable	4.0mm ² , 300mm
Bypass Diodes	3pcs
Wind/ Snow Load	2400Pa/5400Pa
Connector	MC4 Compatible

Electrical Specification

(STC: Irradiance 1000W/m², cell temperature 25°C, AM1.5G — NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind speed 1m/s)

Module Type	SF-M18/G120-445		SF-M18/G120-450		SF-M18/G120-455		SF-M18/G120-460	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	445	330.19	450	333.90	455	337.61	460	341.32
Maximum Power Voltage (Vmp) [V]	34.33	31.93	34.48	32.07	34.63	32.21	34.78	32.35
Maximum Power Current (Imp) [A]	12.96	10.34	13.05	10.41	13.14	10.48	13.23	10.55
Open Circuit Voltage (Voc) [V]	41.21	38.33	41.36	38.46	41.51	38.60	41.66	38.74
Short Circuit Current (Isc) [A]	13.76	10.98	13.84	11.04	13.91	11.10	13.98	11.15
Module Efficiency[%]	20.59		20.82		21.05		21.28	
Cell Type[mm]	Mono 182x91,120 cells							
Operational Temperature[°C]	-40~+85°C							
Maximum System Voltage	1500V DC							
Max Series Fuse Rating	25A							

Electrical characteristics with different power bin(reference to 10% Irradiance ratio)

Total Equivalent power(Pmax)[Wp]	490	495	501	506
Maximum Power Voltage (Vmp) [V]	34.33	34.48	34.63	34.78
Maximum Power Current (Imp) [A]	14.26	14.36	14.45	14.55
Open Circuit Voltage (Voc) [V]	41.21	41.36	41.51	41.66
Short Circuit Current (Isc) [A]	15.14	15.22	15.30	15.38
Irradiance ratio(rear/front)	10%			

Temperature Ratings

Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient of Isc	+0.06%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Pmax	-0.39%/°C

Curve diagram

