

SF-M18/120

470-485W

182*91mm cells 60

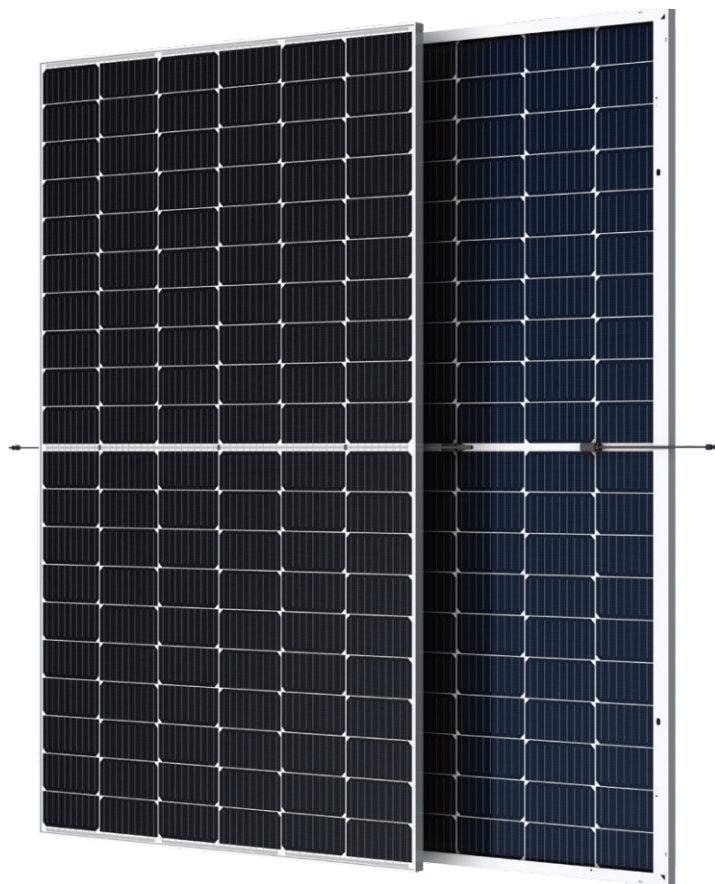
Bifacial Single Glass

N-TYPE half-cell module

Max Power out: 485W

Max Efficiency: 22.44%

Power Tolerance: 0~+5W



SMBB Technology

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



HOT 2.0 Technology

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



PID Resistance

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



Enhanced Mechanical Load

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



Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.

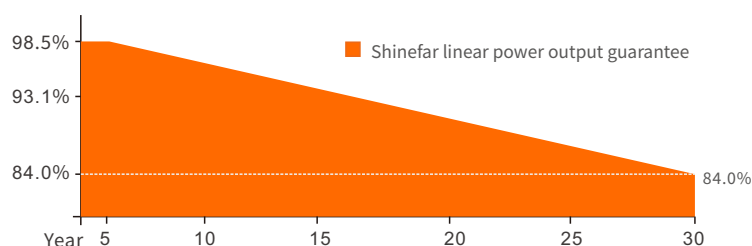


High energy generation, low LCOE

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

Superior Warranty

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

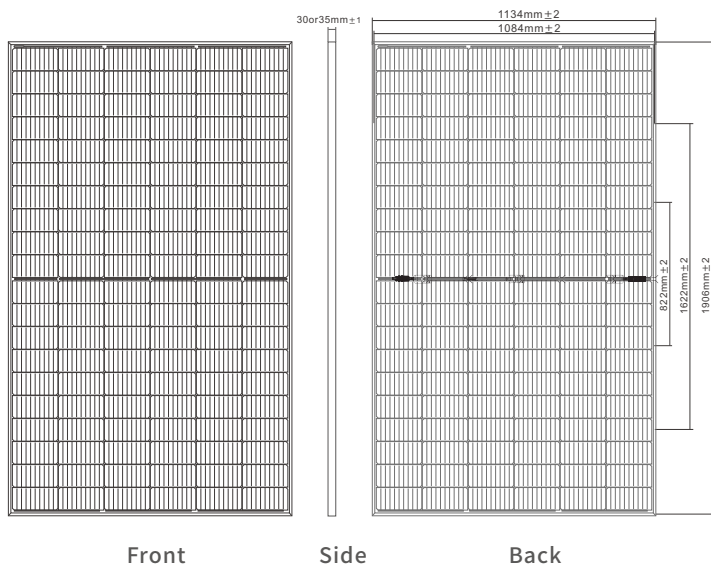


Comprehensive Products and System Certificates

- 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	22kg
Packing	37/31/pallet, 888/744/40hq
Front Glass	High Transparency Solar Glass 3.2mm
Back Glass	Transparent or Transparent Grid
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-M18/120470		SF-M18/120475		SF-M18/120480		SF-M18/120485	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	470	348.74	475	352.45	480	356.16	485	359.87
Maximum Power Voltage (Vmp) [V]	35.08	32.62	35.23	32.76	35.38	32.90	35.53	33.04
Maximum Power Current (Imp) [A]	13.40	10.69	13.48	10.76	13.57	10.82	13.65	10.89
Open Circuit Voltage (Voc) [V]	41.96	39.02	42.11	39.16	42.26	39.30	42.41	39.44
Short Circuit Current (Isc) [A]	14.12	11.27	14.19	11.32	14.26	11.38	14.33	11.43
Module Efficiency [%]	21.75		21.98		22.21		22.44	
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]	502.90	508.25	513.60	518.95
Maximum Power Voltage (Vmp) [V]	35.08	35.23	35.38	35.53
Maximum Power Current (Imp) [A]	14.34	14.43	14.52	14.61
Open Circuit Voltage (Voc) [V]	41.96	42.11	42.26	42.41
Short Circuit Current (Isc) [A]	15.11	15.19	15.26	15.33
Irradiance ratio (rear/front)	10%			

Temperature Ratings

Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.23%/°C
Temperature Coefficient of Pmax	-0.29%/°C

Curve diagram

