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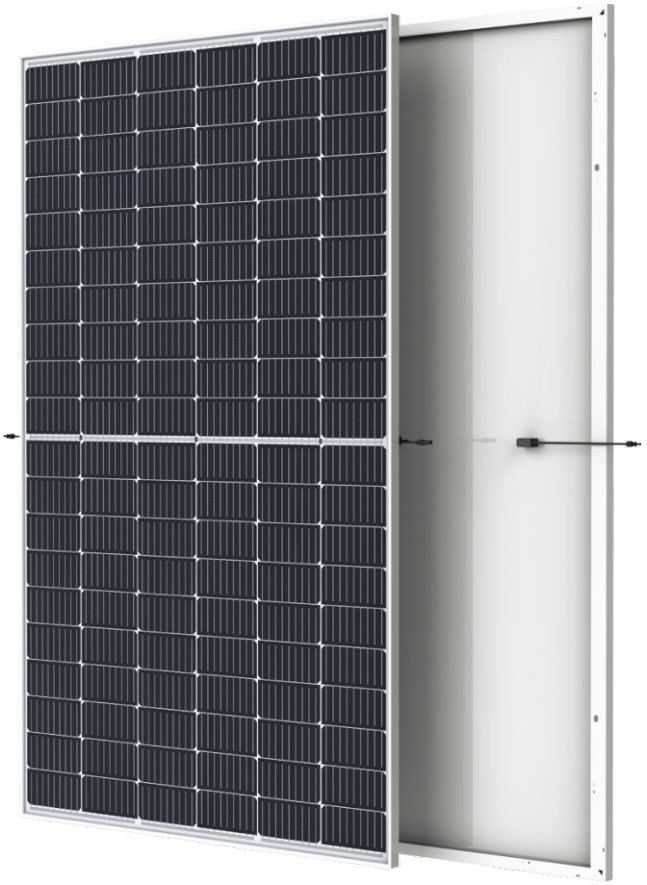
SF-M18/120
480-495W

182±1.5×91±1.5mm
Cells 120



Monocrystalline

N-TYPE Half-Cell Module

Max Power Out: 495W
Max Efficiency: 22.90%
Power Tolerance: 0~+5W

SMBB Technology

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

Reduced Hot Spot Loss

Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.

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

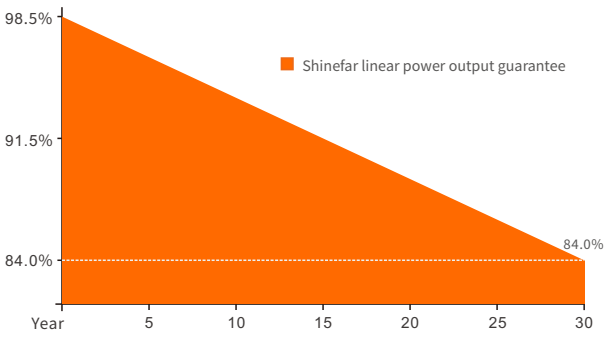
High salt mist and ammonia resistance.

High Energy Generation, Low LCOE

Low Pmax temp coefficient increases energy production

Superior Warranty

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



Comprehensive Products and System Certificates

- IEC/EN61215-1:2021 & IEC/EN61215-2:2021
- IEC/EN61730-1:2016 & IEC/EN61730-2:2016
- UL61730-1:2017 & UL61730-2:2017
- UL61215-1:2017 & UL61215-2:2017
- IEC 61701:2020-Saltmist
- IEC 62716:2013-Ammonia
- IEC 62804:2020-PID
- IECEE Certificate Body (CB)
- UKCA:EN61730-2018
- ISO9001 & ISO14001 & ISO45001

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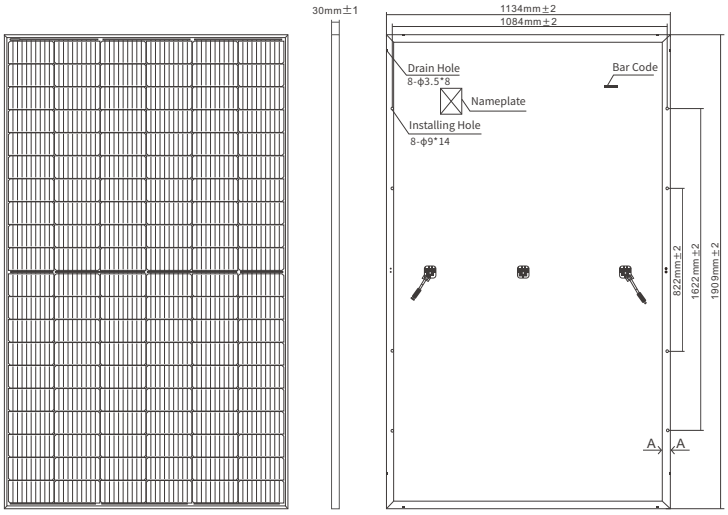
Engineering Drawings



Front Side Back

Structural Parameter

Dimensions of Module	1909×1134×30mm
Weight	23.6kg
Packing	37PCS/Pallet, 888PCS/40HQ
Glass	High Transparency Solar Glass 3.2mm
Backsheet	White
Frame	Anodized Aluminum Alloy & Custom Color Accepted
J-Box	IP68 Rated
Cable	4.0mm², 300mm
Bypass Diodes	3PCS
Wind/ Snow Load	2400Pa/5400Pa
Connector	MC4 Compatible

Electrical Specification

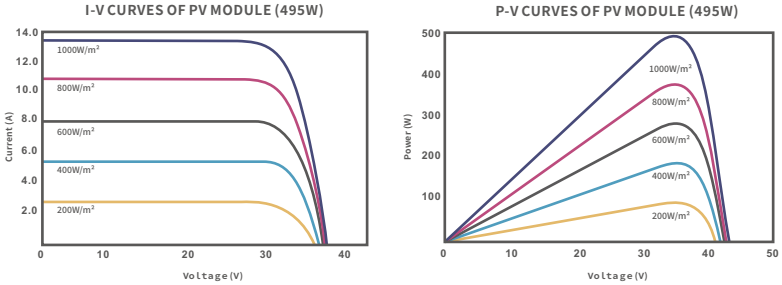
(STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5G — NOCT: Irradiance 800W/m2, Ambient temperature 20°C, Wind speed 1m/s)

Module Type	SF-M18/120480		SF-M18/120485		SF-M18/120490		SF-M18/120495	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	480	356.16	485	359.87	490	363.58	495	367.29
Maximum Power Voltage (Vmp) [V]	35.38	32.90	35.53	33.04	35.68	33.18	35.83	33.32
Maximum Power Current (Imp) [A]	13.57	10.82	13.65	10.89	13.73	10.96	13.82	11.02
Open Circuit Voltage (Voc) [V]	42.26	39.30	42.41	39.44	42.56	39.58	42.71	39.72
Short Circuit Current (Isc) [A]	14.26	11.38	14.33	11.43	14.39	11.48	14.46	11.54
Module Efficiency [%]	22.21		22.44		22.67		22.90	
Cell Type [mm]	Mono 182±1.5×91±1.5, 120 Cells							
Operational Temperature [°C]	-40~+85°C							
Maximum System Voltage	1500V DC							
Max Series Fuse Rating	25A							

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	-0.30%/°C

Curve Diagram



Solar Excellence in Every Ray

For more details please check the installation manual of SF