

SF-M18/144

565-580W

182*91mm cells 72

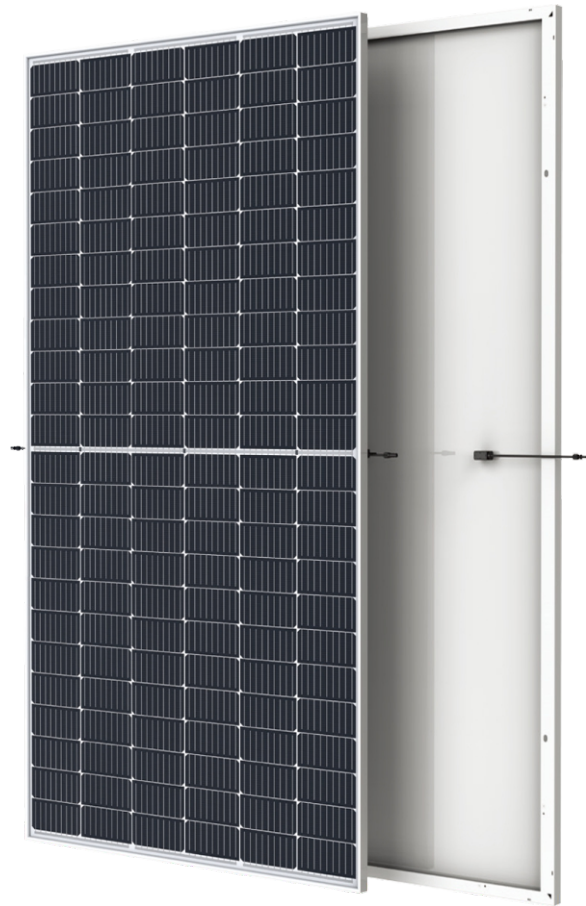
Monocrystalline

N-TYPE half-cell module

Max Power out:580W

Max Efficiency:22.45%

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 (4000 Pascal) and snow load (6000 Pascal).



Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.

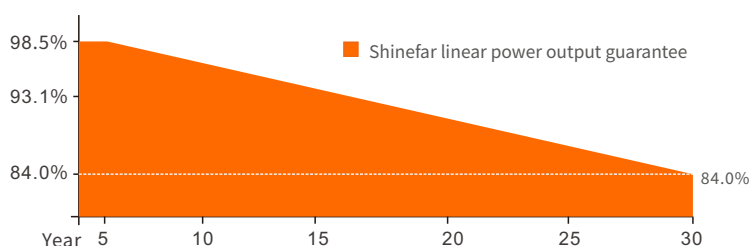


High energy generation, low LCOE

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

Superior Warranty

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

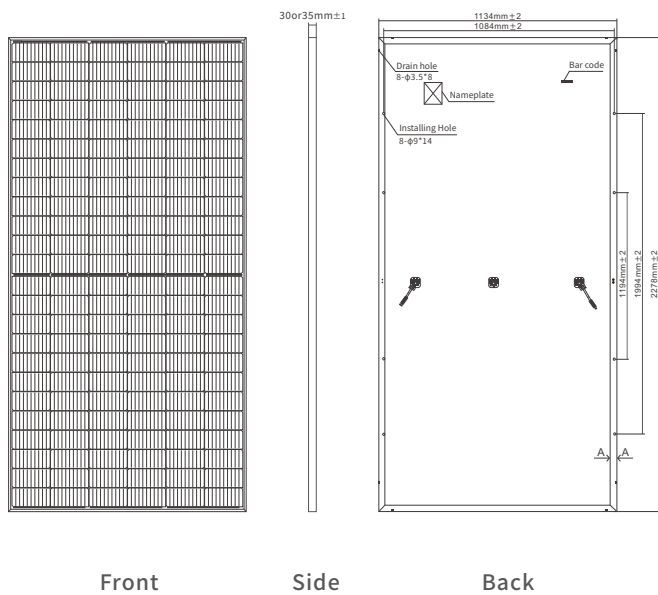


Comprehensive Products and System Certificates

- 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	2278x1134x30 or 2278x1134x35mm
Weight	26kg
packing	37/31/pallet,740/620/40hq
Glass	High transparency solar glass 3.2mm
Backsheet	White
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-M18/144565		SF-M18/144570		SF-M18/144575		SF-M18/144580	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	565	423.19	570	426.93	575	430.68	580	434.42
Maximum Power Voltage (Vmp) [V]	42.43	39.67	42.59	39.82	42.75	39.97	42.91	40.12
Maximum Power Current (Imp) [A]	13.32	10.67	13.38	10.72	13.45	10.77	13.52	10.83
Open Circuit Voltage (Voc) [V]	50.35	47.08	50.50	47.22	50.65	47.36	50.80	47.50
Short Circuit Current (Isc) [A]	14.32	11.47	14.39	11.53	14.47	11.59	14.55	11.65
Module Efficiency[%]	21.87		22.07		22.26		22.45	
Cell Type[mm]	Mono 182x91,144 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	-0.29%/°C

Curve diagram

