

SF-M18/144

540-555W

182*91mm cells 72

Monocrystalline

PERC half-cell module

Max Power out:555W

Max Efficiency:21.48%

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

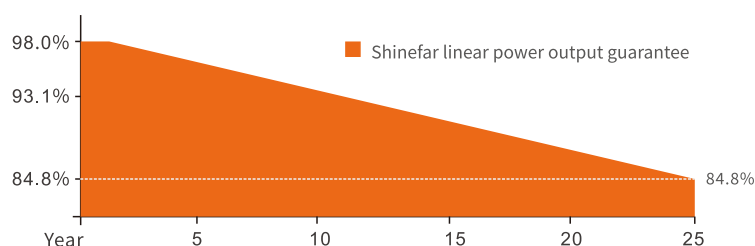


High energy generation, low LCOE

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

Superior Warranty

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

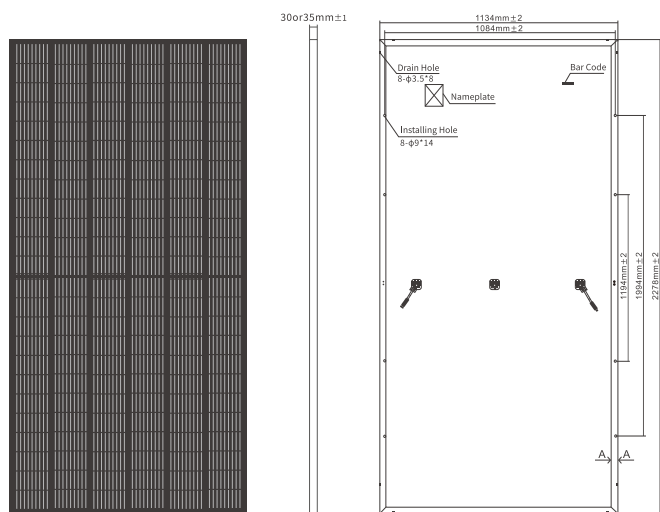


Comprehensive Products and System Certificates

- 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



Front

Side

Back

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	air-side white , cell-side High reflection black
Frame	Black, 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-M18/144-540		SF-M18/144-545		SF-M18/144-550		SF-M18/144-555	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	540	404.46	545	408.21	550	411.95	555	415.70
Maximum Power Voltage (Vmp) [V]	41.63	38.92	41.79	39.07	41.95	39.22	42.11	39.37
Maximum Power Current (Imp) [A]	12.97	10.39	13.04	10.45	13.11	10.50	13.18	10.56
Open Circuit Voltage (Voc) [V]	49.60	46.38	49.75	46.52	49.90	46.66	50.05	46.80
Short Circuit Current (Isc) [A]	13.94	11.17	14.02	11.23	14.09	11.29	14.17	11.35
Module Efficiency[%]	20.90		21.10		21.29		21.48	
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	+0.06%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Pmax	-0.39%/°C

Curve diagram

