

SF-M18/108

400-415W

182*91mm cells 54

Monocrystalline

PERC half-cell module

Max Power out:415W

Max Efficiency:21.25%

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).

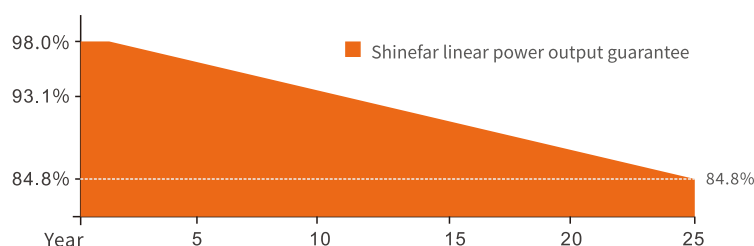


High energy generation, low LCOE

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

Superior Warranty

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

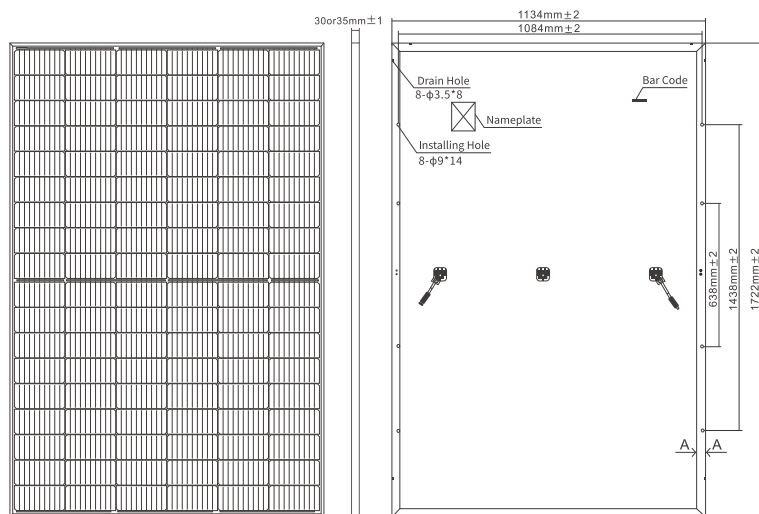


Comprehensive Products and System Certificates

- 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	1722x1134x30 or 1722x1134x35mm
Weight	20kg
packing	37/31/pallet,962/806/40hq
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-M18/108-400		SF-M18/108-405		SF-M18/108-410		SF-M18/108-415	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	400	296.8	405	300.51	410	304.22	415	307.93
Maximum Power Voltage (Vmp) [V]	31.01	28.84	31.18	29.00	31.35	29.16	31.52	29.31
Maximum Power Current (Imp) [A]	12.90	10.29	12.99	10.36	13.08	10.43	13.17	10.50
Open Circuit Voltage (Voc) [V]	37.07	34.48	37.16	34.56	37.25	34.64	37.34	34.73
Short Circuit Current (Isc) [A]	13.75	10.97	13.86	11.06	13.97	11.14	14.07	11.23
Module Efficiency[%]	20.48		20.74		21.00		21.25	
Cell Type[mm]	Mono 182x91,108cells							
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 I _{sc}	+0.06%/°C
Temperature Coefficient of V _{oc}	-0.30%/°C
Temperature Coefficient of P _{max}	-0.39%/°C

Curve diagram

