



# SF-M18/108

## 305-320W

### 182±1.5×91±1.5mm

### Cells 108

#### Monocrystalline

#### PERC Half-Cell Module

Max Power Out: 320W

Max Efficiency: 16.39%

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.

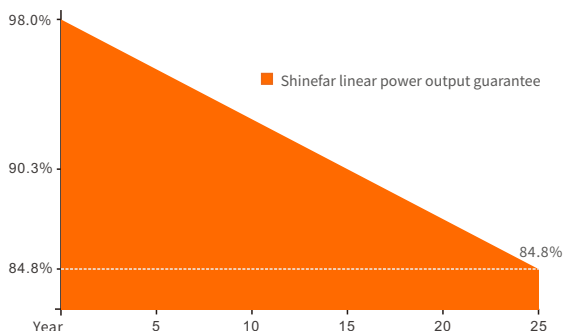


#### High Energy Generation, Low LCOE

Low Pmax temp coefficient increases energy production

### Superior Warranty

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

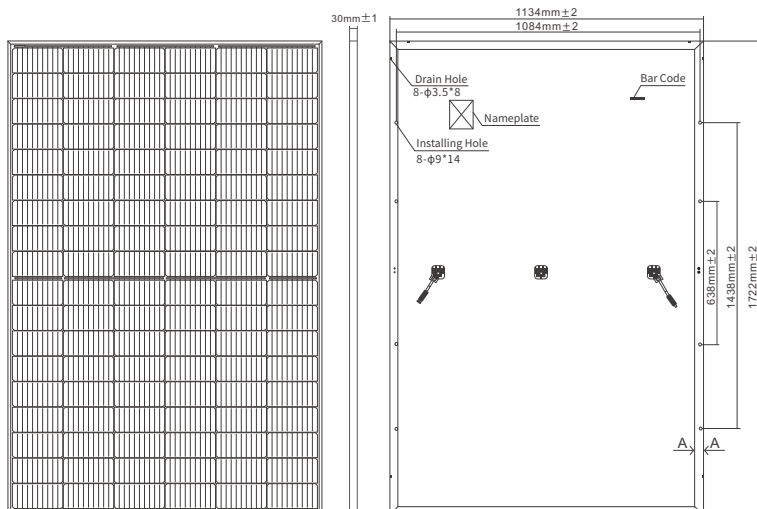


### Comprehensive Products and System Certificates

- 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



## Engineering Drawings



Front

Side

Back

## Structural Parameter

Dimensions of Module	1722×1134×30mm
Weight	20.3kg
Packing	37PCS/Pallet, 962PCS/40HQ
Glass	Red, High Transparency Solar Glass 3.2mm
Backsheet	Black
Frame	Red, Anodized Aluminium Alloy
J-Box	IP68 Rated
Cable	4.0mm <sup>2</sup> , 300mm
Bypass Diodes	3PCS
Wind/ Snow Load	2400Pa/5400Pa
Connector	MC4 Compatible

## Electrical Specification

(STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5G — NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind speed 1m/s)

Module Type	SF-M18/108305		SF-M18/108310		SF-M18/108315		SF-M18/108320	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	305	227.23	310	230.95	315	234.68	320	238.40
Maximum Power Voltage (Vmp) [V]	32.20	29.95	32.37	30.10	32.54	30.26	32.71	30.42
Maximum Power Current (Imp) [A]	9.47	7.59	9.58	7.67	9.68	7.75	9.78	7.84
Open Circuit Voltage (Voc) [V]	37.70	35.06	37.79	35.14	37.88	35.23	37.97	35.31
Short Circuit Current (Isc) [A]	10.16	8.14	10.28	8.23	10.40	8.33	10.52	8.42
Module Efficiency [%]	15.62		15.88		16.13		16.39	
Cell Type [mm]	Mono 182±1.5×91±1.5, 108 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

