

# SF-M18/144

## 565-580W

### 182 × 91mm cells 72

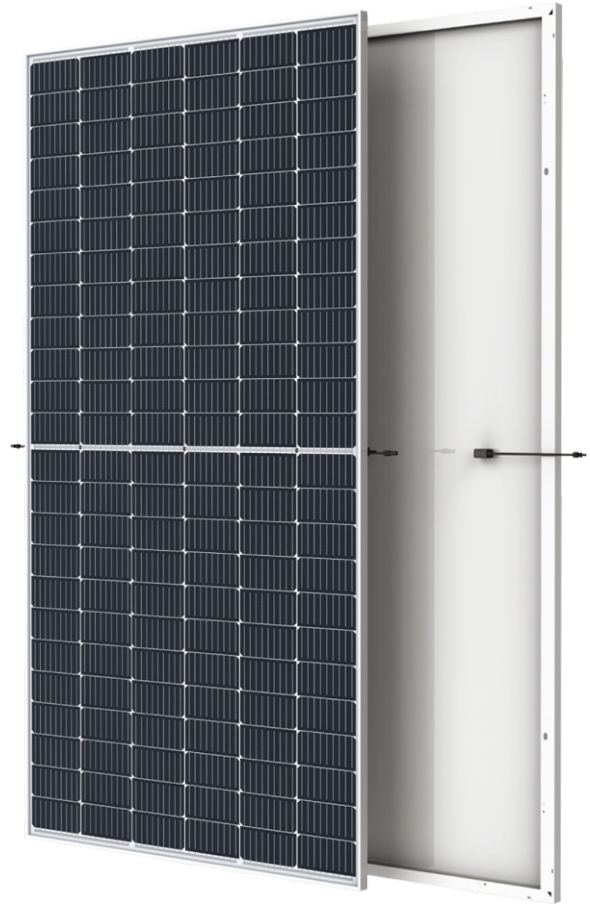
### Monocrystalline

### 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



#### 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.



#### Reduced Hot Spot Loss

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



#### Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

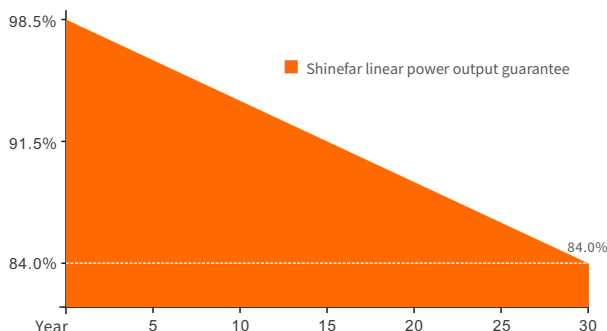


#### High energy generation, low LCOE

Low Pmax temp coefficient increases energy production

### Superior Warranty

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

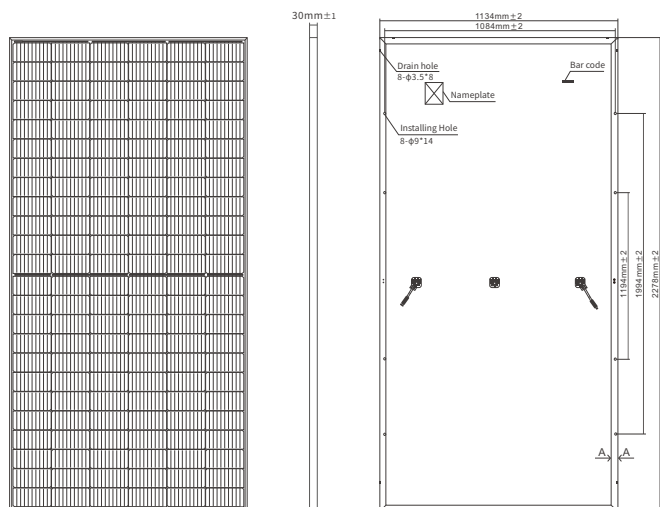


### Comprehensive Products and System Certificates

- 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
- IECCE CertificateBody (CB)
- UKCA:EN61730-2018
- ISO9001 & ISO14001 & ISO45001



## Engineering Drawings



Front

Side

Back

## Structural Parameter

Dimensions of Module	2278×1134×30mm
Weight	26kg
Packing	37/pallet, 740/40HQ
Glass	High transparency solar glass 3.2mm
Backsheet	White
Frame	Anodized aluminum alloy & Custom color accepted
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-M18/144565		SF-M18/144570		SF-M18/144575		SF-M18/144580	
	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 182×91, 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	-0.30%/°C

## Curve Diagram

