

SF-M21/100

500-515W

210×105mm cells 50



Monocrystalline

PERC Half-Cell Module

Max Power out: 515W

Max Efficiency: 21.63%

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.

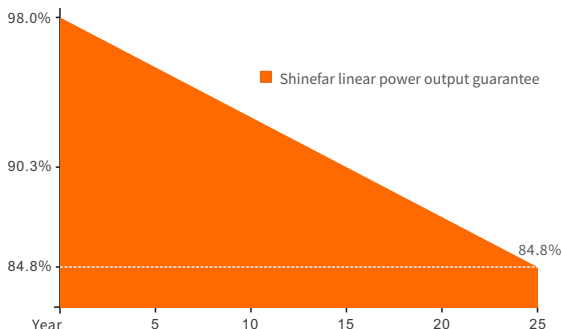


High energy generation, low LCOE

Low Pmax temp coefficient increases energy production

Superior Warranty

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

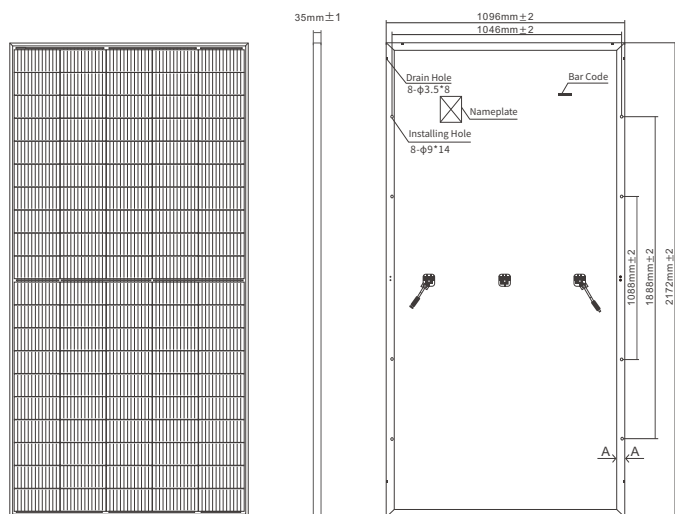


Comprehensive Products and System Certificates

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



Engineering Drawings



Front

Side

Back

Structural Parameter

Dimensions of Module	2172×1096×35mm
Weight	26kg
Packing	31/pallet, 640/40hq
Glass	High transparency solar glass 3.2mm
Backsheet	White
Frame	Anodized aluminum alloy & Custom color accepted
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-M21/100500		SF-M21/100505		SF-M21/100510		SF-M21/100515	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	500	378	505	382	510	385	515	389
Maximum Power Voltage (Vmp) [V]	28.76	26.73	28.96	26.93	29.16	27.13	29.36	27.33
Maximum Power Current (Imp) [A]	17.39	14.13	17.44	14.17	17.49	14.20	17.54	14.24
Open Circuit Voltage (Voc) [V]	34.49	32.06	34.69	32.26	34.89	32.46	35.09	32.66
Short Circuit Current (Isc) [A]	18.55	15.08	18.60	15.11	18.66	15.15	18.71	15.19
Module Efficiency [%]	21.00		21.21		21.42		21.63	
Cell Type [mm]	Mono 210×105, 100cells							
Operational Temperature [°C]	-40~+85°C							
Maximum System Voltage	1500V DC							
Max Series Fuse Rating	30A							

Temperature Ratings

Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.35%/°C

Curve Diagram

