

# SF-M15L/72

## 400-415W

158.75 ± 1.5 × 158.75 ± 1.5mm

Cells 72

**Monocrystalline**

**PERC Full Cell Module**

Max Power Out: 415W

Max Efficiency: 20.93%

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).

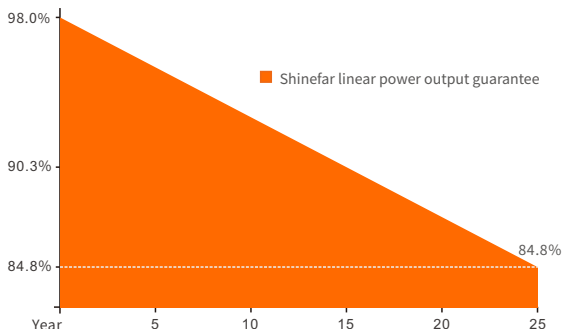


### High Energy Generation, Low LCOE

Low Pmax temp coefficient increases energy production

## Superior Warranty

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

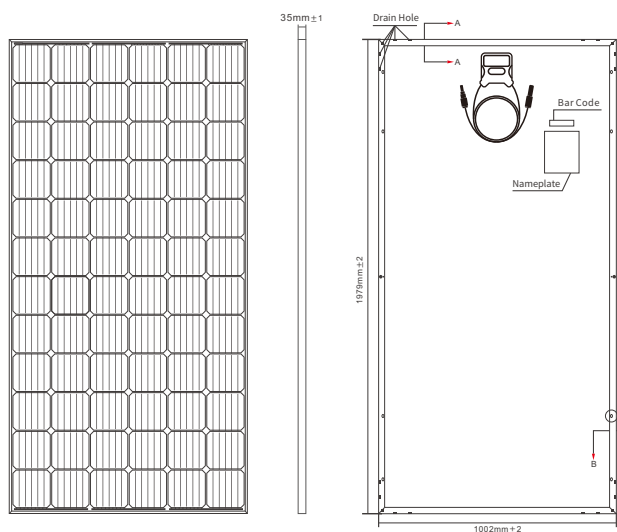


## Comprehensive Products and System Certificates

- 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	1979×1002×35mm
Weight	20.5kg
Packing	31PCS/Pallet, 799PCS/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> , 1100mm
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-M15L/72400		SF-M15L/72405		SF-M15L/72410		SF-M15L/72415	
	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]	40.48	37.65	40.68	37.83	40.88	38.02	41.08	38.20
Maximum Power Current (Imp) [A]	9.88	7.88	9.96	7.94	10.03	8.00	10.10	8.06
Open Circuit Voltage (Voc) [V]	49.00	45.57	49.20	45.76	49.40	45.94	49.60	46.13
Short Circuit Current (Isc) [A]	10.34	8.25	10.41	8.30	10.47	8.35	10.53	8.40
Module Efficiency [%]	20.17		20.42		20.68		20.93	
Cell Type [mm]	Mono 158.75±1.5×158.75±1.5, 72 Cells							
Operational Temperature [°C]	-40~+85°C							
Maximum System Voltage	1500V DC							
Max Series Fuse Rating	15A							

## 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

