

# SF-M16/G156

## 485-500W

### 166±1.5×83±1.5mm

### Cells 156

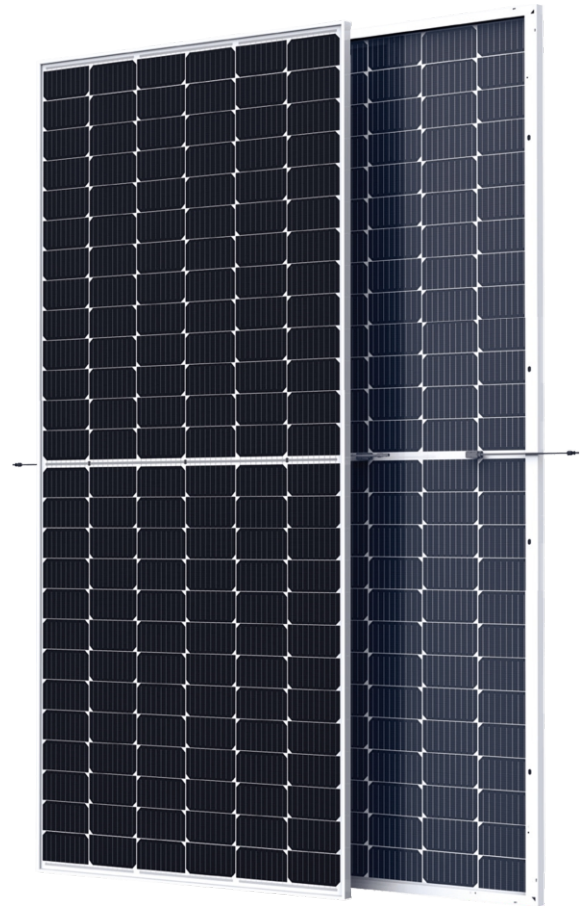
#### Bifacial Double Glass

#### PERC Half-Cell Module

Max Power Out: 500W

Max Efficiency: 21.27%

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).

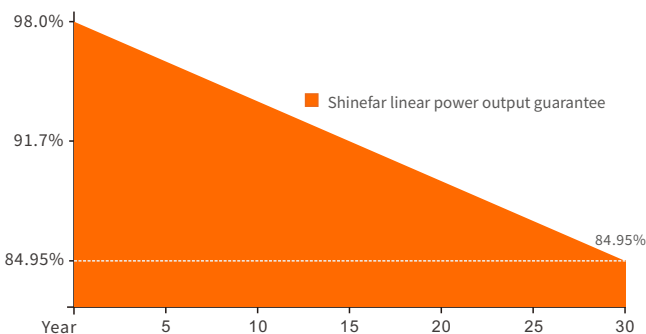


#### High Energy Generation, Low LCOE

Low Pmax temp coefficient increases energy production

### Superior Warranty

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

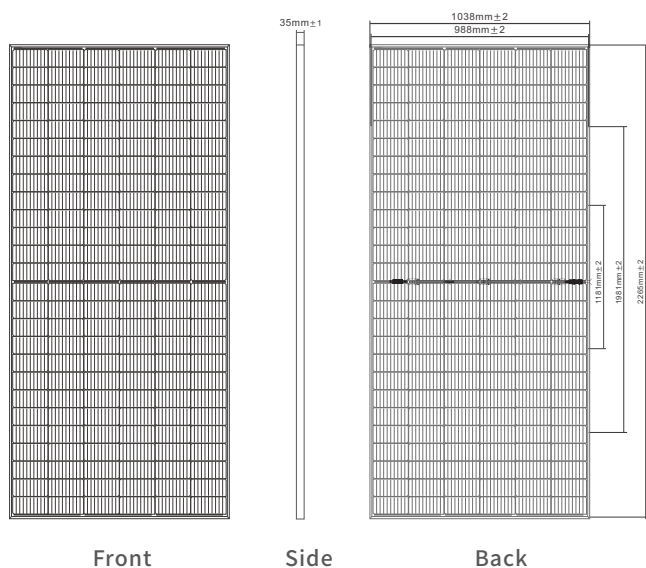


### Comprehensive Products and System Certificates

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



## Engineering Drawings



## Structural Parameter

Dimensions of Module	2265 × 1038 × 35mm
Weight	29.6kg
Packing	31PCS/Pallet, 680PCS/40HQ
Front Glass	High Transparency Solar Glass 2.0mm
Back Glass	Heat Strengthened Glass 2.0mm
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-M16/G156485		SF-M16/G156490		SF-M16/G156495		SF-M16/G156500	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	485	359.87	490	363.58	495	367.29	500	371.00
Maximum Power Voltage (Vmp) [V]	44.65	41.80	44.85	41.99	45.05	42.18	45.25	42.37
Maximum Power Current (Imp) [A]	10.86	8.61	10.93	8.66	10.99	8.71	11.05	8.76
Open Circuit Voltage (Voc) [V]	54.06	50.61	54.26	50.80	54.46	50.99	54.66	51.18
Short Circuit Current (Isc) [A]	11.32	8.97	11.37	9.01	11.41	9.05	11.46	9.08
Module Efficiency [%]	20.63		20.84		21.05		21.27	
Cell Type [mm]	Mono $166 \pm 1.5 \times 83 \pm 1.5$ , 156 Cells							
Operational Temperature [°C]	-40~+85°C							
Maximum System Voltage	1500V DC							
Max Series Fuse Rating	20A							

## Electrical Characteristics With Different Power Bin (Reference to 10% Irradiance Ratio)

Parameter	534	539	545	550
Total Equivalent Power (Pmax) [Wp]	534	539	545	550
Maximum Power Voltage (Vmp) [V]	44.65	44.85	45.05	45.25
Maximum Power Current (Imp) [A]	11.95	12.02	12.09	12.15
Open Circuit Voltage (Voc) [V]	54.06	54.26	54.46	54.66
Short Circuit Current (Isc) [A]	12.45	12.50	12.56	12.61
Irradiance Ratio (Rear/Front)	10%			

## Temperature Ratings

Nominal Operating Cell Temperature	$45 \pm 2^\circ\text{C}$
Temperature Coefficient of Isc	$+0.06\%/^\circ\text{C}$
Temperature Coefficient of Voc	$-0.30\%/^\circ\text{C}$
Temperature Coefficient of Pmax	$-0.39\%/^\circ\text{C}$

## Curve Diagram

