

# SF-M16/G120

## 365-380W

### 166×83mm cells 60

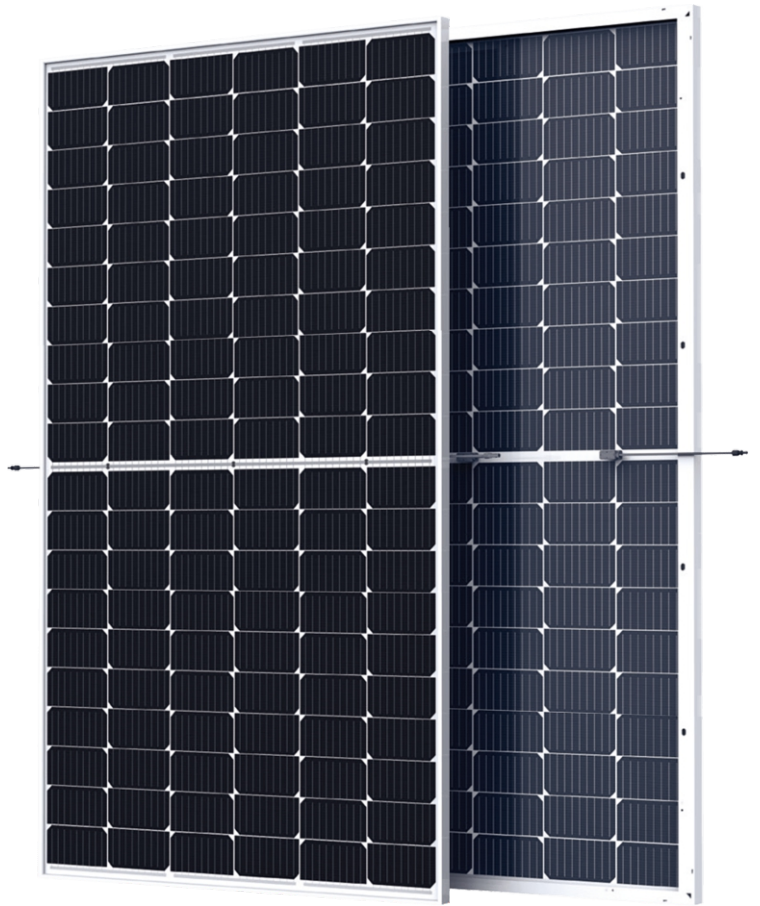
#### Bifacial Double Glass

#### PERC Half-Cell Module

Max Power out: 380W

Max Efficiency: 20.86%

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).

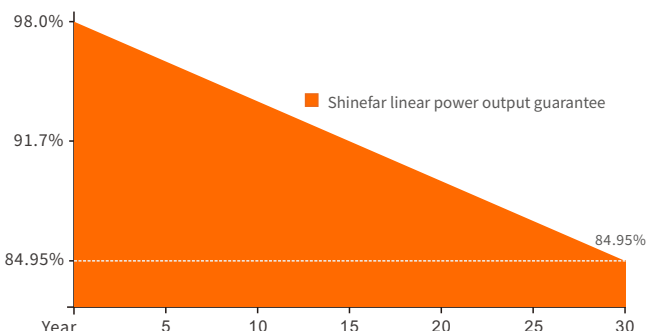


#### High energy generation, low LCOE

Low Pmax temp coefficient increases energy production

### Superior Warranty

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

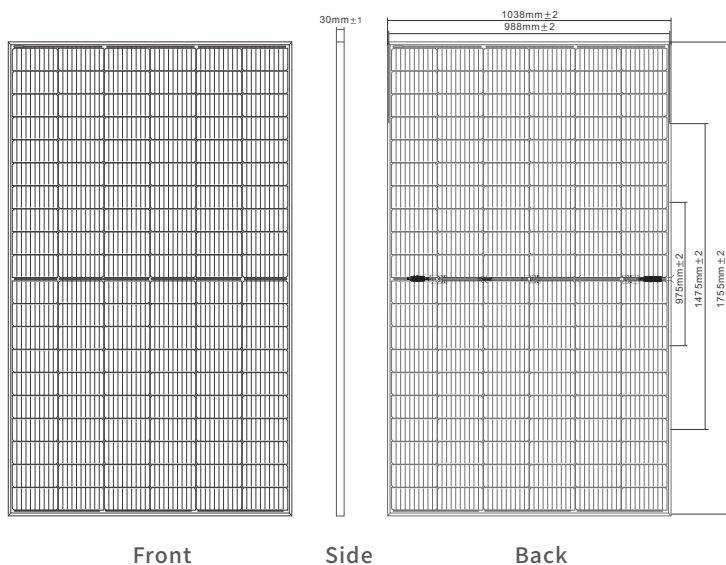


### Comprehensive Products and System Certificates

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



## Engineering Drawings



## Structural Parameter

|                      |   |
|----------------------|---|
| Dimensions of Module | 1755 × 1038 × 30mm                              |
| Weight               | 23.5kg  |
| Packing              | 37/pallet, 1053/40hq                            |
| 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/G120365           |        | SF-M16/G120370 |        | SF-M16/G120375 |        | SF-M16/G120380 |        |
|---------------------------------|--------------------------|--------|----------------|--------|----------------|--------|----------------|--------|
|                                 | STC                      | NOCT   | STC            | NOCT   | STC            | NOCT   | STC            | NOCT   |
| Maximum Power (Pmax) [W]        | 365                      | 270.83 | 370            | 274.54 | 375            | 278.25 | 380            | 281.96 |
| Maximum Power Voltage (Vmp) [V] | 34.13                    | 31.95  | 34.33          | 32.14  | 34.53          | 32.33  | 34.73          | 32.52  |
| Maximum Power Current (Imp) [A] | 10.69                    | 8.48   | 10.78          | 8.54   | 10.86          | 8.61   | 10.94          | 8.67   |
| Open Circuit Voltage (Voc) [V]  | 41.17                    | 38.55  | 41.37          | 38.73  | 41.57          | 38.92  | 41.77          | 39.11  |
| Short Circuit Current (Isc) [A] | 11.23                    | 8.90   | 11.31          | 8.96   | 11.38          | 9.02   | 11.45          | 9.07   |
| Module Efficiency [%]           | 20.04                    |        | 20.31          |        | 20.59          |        | 20.86          |        |
| Cell Type [mm]                  | Mono 166 × 83, 120 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)

|                                    |       |       |       |       |
|------------------------------------|-------|-------|-------|-------|
| Total Equivalent power (Pmax) [Wp] | 402   | 407   | 413   | 418   |
| Maximum Power Voltage (Vmp) [V]    | 34.13 | 34.33 | 34.53 | 34.73 |
| Maximum Power Current (Imp) [A]    | 11.76 | 11.86 | 11.95 | 12.04 |
| Open Circuit Voltage (Voc) [V]     | 41.17 | 41.37 | 41.57 | 41.77 |
| Short Circuit Current (Isc) [A]    | 12.35 | 12.44 | 12.52 | 12.59 |
| Irradiance ratio (rear/front)      | 10%   |       |       |       |

## 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

