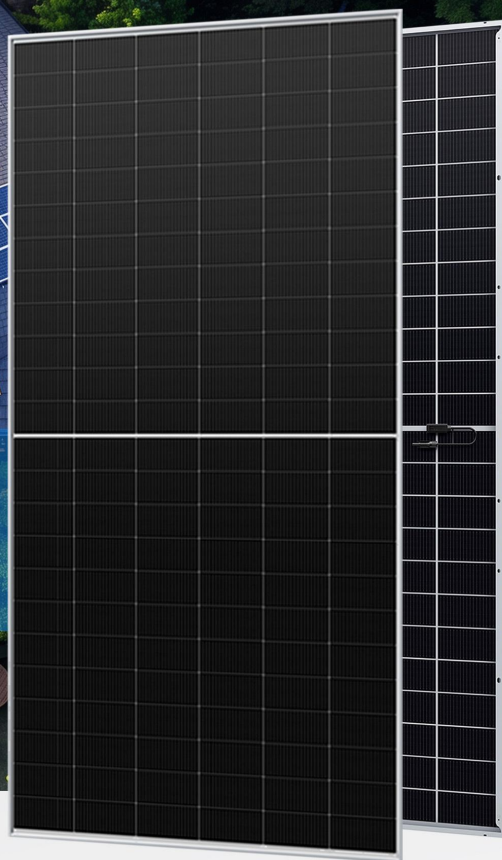




Goosun Energy Construction Group Co., Ltd

# 575W~600W

## N-Type Monocrystalline Bifacial Solar Modules



### ► Product Characteristics

#### N-Type Technology

The N-Type module has lower LID/LeTID attenuation and better low light performance.

#### multi-master grid technology

Better light utilization and current harvesting capability. Effectively improves product power output and reliability.

**12** Year

Material Workmanship Warranties

#### load capacity

Integral assembly passes frontal maximum test static at 6000 Pa. load certification.

#### Anti PID Guarantee

Through the optimization of battery production technology and material control to minimize the chance of degradation caused by PID phenomenon.

**30** Year

The nature of the year line protects

#### double-sided generation

Increased light exposure on the back side of double-sided power generation significantly reduces LCOE

#### HOT 3.0 Technology

HOT3.0 technology N-type modules offer better reliability and power generation efficiency.

**1** %

First year power degradation

**0.4** %

Linear power attenuation



### ► certification

- EC61215、IEC61730、CE、CQC
- ISO8001:2015 Quality Management System
- ISO14001:2015 Environmental Management System
- ISO45001:2018 Occupational Health and safety management



# 575~600w

N-type monocrystalline silicon bifacial solar modules

## Mechanical Characteristics

|                  |                                                                       |
|------------------|-----------------------------------------------------------------------|
| Cell Type        | N- type Mono-crystalline                                              |
| No. of cells     | 144 (72×2)                                                            |
| Dimensions       | 2278×1134×30 mm                                                       |
| Weight           | 31.0 kg                                                               |
| Front Glass      | 2.0 mm, Anti-reflection Coating                                       |
| Back Glass       | 2.0 mm, Heat Strengthened Glass                                       |
| Frame            | Anodized Aluminium Alloy                                              |
| Junction Box     | IP68 Rated                                                            |
| Protection Class | Class II                                                              |
| IEC Fire Type    | Class C                                                               |
| Connector Type   | JK03M/MC4/Others                                                      |
| Output Cables    | 4.0 mm <sup>2</sup><br>(+): 400 mm , (-): 200 mm or Customized Length |

## Packaging Configuration

|                           |                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------|
| Pallet Dimentions         | 2338×1140×1251 mm                                                                              |
| Packing Detail            | 13m flatbed:36/pallet, 20/pallet, 720/pallet<br>17.5m flatbed:36/pallet, 26/pallet, 936/pallet |
| (Two pallets = One stack) |                                                                                                |

## Specifications(STC)

|                                  |            |       |       |       |       |       |
|----------------------------------|------------|-------|-------|-------|-------|-------|
| Maximum Power - Pmax [Wp]        | 575        | 580   | 585   | 590   | 595   | 600   |
| Maximum Power Voltage - Vmp [V]  | 43.73      | 43.88 | 44.02 | 44.17 | 44.31 | 44.45 |
| Maximum Power Current - Imp [A]  | 13.15      | 13.22 | 13.29 | 13.36 | 13.43 | 13.50 |
| Open-circuit Voltage - Voc [V]   | 52.30      | 52.50 | 52.70 | 52.90 | 53.10 | 53.30 |
| Short-circuit Current - Isc [A]  | 13.89      | 13.95 | 14.01 | 14.07 | 14.13 | 14.19 |
| Module Efficiency STC [%]        | 22.3       | 22.5  | 22.7  | 22.8  | 23.0  | 23.2  |
| Power Tolerance                  | 0 ~ +3 %   |       |       |       |       |       |
| Temperature Coefficients of Pmax | -0.29 %/°C |       |       |       |       |       |
| Temperature Coefficients of Voc  | -0.25 %/°C |       |       |       |       |       |
| Temperature Coefficients of Isc  | 0.045 %/°C |       |       |       |       |       |

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Specifications(BNPI)

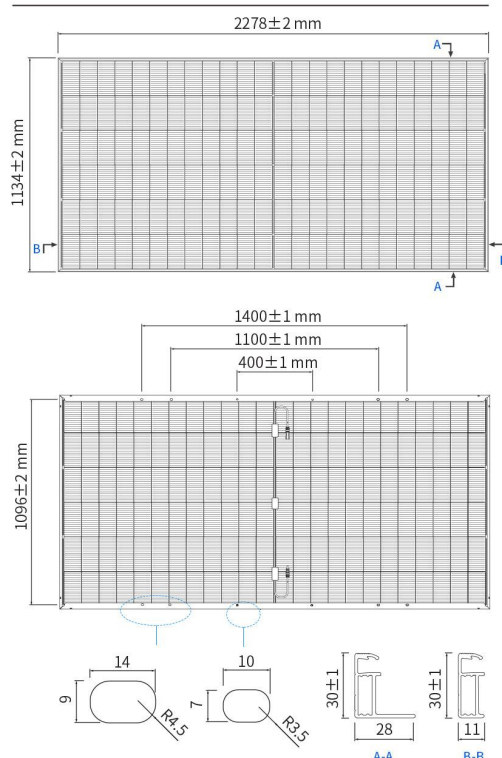
|                                 |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| Maximum Power - Pmax [Wp]       | 633   | 638   | 644   | 649   | 655   | 660   |
| Maximum Power Voltage - Vmp [V] | 43.84 | 44.00 | 44.17 | 44.33 | 44.50 | 44.66 |
| Maximum Power Current - Imp [A] | 14.44 | 14.50 | 14.58 | 14.64 | 14.72 | 14.78 |
| Open-circuit Voltage - Voc [V]  | 52.33 | 52.53 | 52.73 | 52.93 | 53.13 | 53.33 |
| Short-circuit Current - Isc [A] | 15.19 | 15.25 | 15.31 | 15.37 | 15.43 | 15.49 |

BNPI: Irradiance: front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Application Conditions

|                            |                                           |
|----------------------------|-------------------------------------------|
| Operating Temperature      | -40 °C ~ +70 °C                           |
| Maximum System Voltage     | 1500 VDC (IEC)                            |
| Maximum Series Fuse Rating | 30 A                                      |
| Bifaciality Coefficient    | φVoc: 98±5 %, φIsc: 80±5 %, φPmax: 80±5 % |

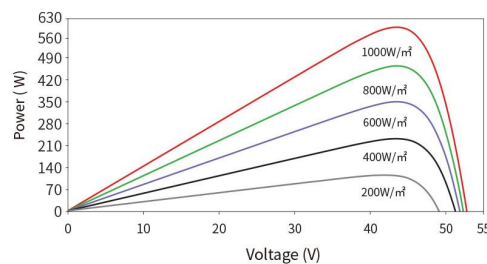
## Engineering Drawings



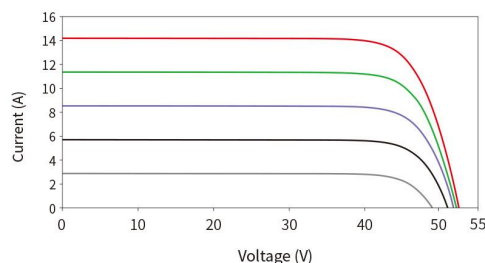
\*Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

## Electrical Performance

Power-Voltage Curves 590W



Current-Voltage Curves 590W



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