

# Lumina II



## Super Power Output

SolarSpace advanced N-Type cells combined with MBB and high-density encapsulation provides ultra-high power output



## High Reliability

Excellent harsh tests results and advanced half-cell tech improve product reliability for long-term life cycle



## Extra Power Generation

N-type wafers and cells bring ultralow LID&LeTID degradation, less than 1% 1<sup>st</sup> year degradation guaranteed, in addition lower temperature coefficient and better weak-light response provide extra power generation



## High ROI

Bifacial power generation reduces BOS and system LCOE dramatically, promoting the project ROI

**SolarSpace Technology Co., Ltd.** was established in 2011, as a world leading solar cell and module manufacturer, concentrating on high efficient solar-technology production with 60GW+ capacity of solar cell and ~10GW capacity of solar module in China and overseas.

\*Please refer to SolarSpace for details

## SS8-72HD

## 580-605N

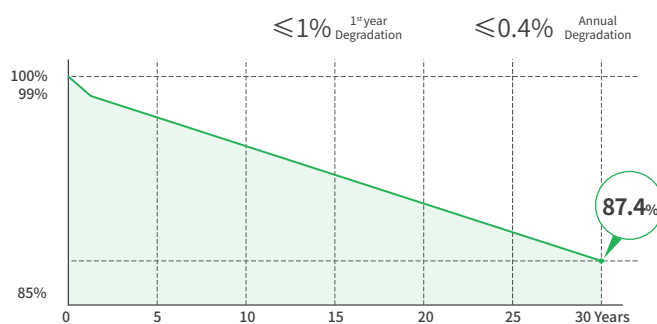
N-Type Bifacial Dual Glass Module

# 605W

Maximum  
Power Output

# 23.42%

Maximum  
Module Efficiency



**15**Years Product Warranty **30**Years Linear Power Warranty

### Comprehensive Certificates

- IEC61215 • IEC61730
- IEC61701: Salt Mist Corrosion Test • IEC62716: Ammonia Corrosion Test
- IEC60068: Dust and Sand Test
- ISO9001: 2015: Quality Management System
- ISO14001: 2015: Environment Management System
- ISO45001: 2018: Occupational Health and Safety Management Systems



## Electric Characteristics (STC)

| Module Type                     | SS8-72HD<br>-580N | SS8-72HD<br>-585N | SS8-72HD<br>-590N | SS8-72HD<br>-595N | SS8-72HD<br>-600N | SS8-72HD<br>-605N |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Maximum Power (Pmax) [W]        | 580               | 585               | 590               | 595               | 600               | 605               |
| Open-Circuit Voltage (Voc) [V]  | 54.09             | 54.36             | 54.63             | 54.90             | 55.17             | 55.44             |
| Maximum Power Voltage (Vmp) [V] | 44.39             | 44.61             | 44.83             | 45.05             | 45.27             | 45.49             |
| Short-Circuit Current (Isc) [A] | 13.71             | 13.76             | 13.81             | 13.86             | 13.91             | 13.96             |
| Maximum Power Current (Imp) [A] | 13.07             | 13.12             | 13.17             | 13.21             | 13.26             | 13.31             |
| Module Efficiency               | 22.45%            | 22.65%            | 22.84%            | 23.03%            | 23.23%            | 23.42%            |

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

## Electric Characteristics (NMOT)

| Module Type                     | SS8-72HD<br>-580N | SS8-72HD<br>-585N | SS8-72HD<br>-590N | SS8-72HD<br>-595N | SS8-72HD<br>-600N | SS8-72HD<br>-605N |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Maximum Power (Pmax) [W]        | 437               | 441               | 445               | 449               | 453               | 457               |
| Open-Circuit Voltage (Voc) [V]  | 51.37             | 51.63             | 51.88             | 52.14             | 52.39             | 52.65             |
| Maximum Power Voltage (Vmp) [V] | 41.53             | 41.67             | 41.85             | 42.03             | 42.20             | 42.34             |
| Short-Circuit Current (Isc) [A] | 11.07             | 11.11             | 11.15             | 11.19             | 11.23             | 11.28             |
| Maximum Power Current (Imp) [A] | 10.53             | 10.59             | 10.64             | 10.69             | 10.74             | 10.80             |

Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20 °C, Wind Speed 1 m/s, AM=1.5

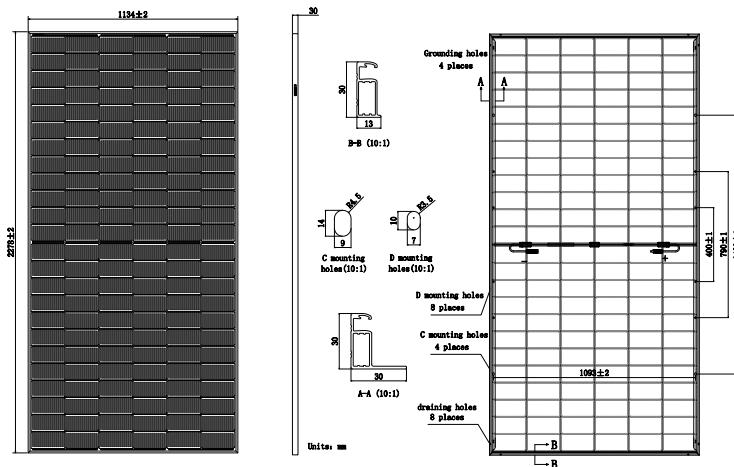
## Bifacial Output-Rearside Power Gain (590W)

| Power Gain                      | 5%    | 10%   | 15%   | 20%   | 25%   |
|---------------------------------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax) [W]        | 620   | 649   | 679   | 708   | 738   |
| Open-Circuit Voltage (Voc) [V]  | 54.63 | 54.63 | 54.63 | 54.73 | 54.73 |
| Maximum Power Voltage (Vmp) [V] | 44.83 | 44.83 | 44.83 | 44.93 | 44.93 |
| Short-Circuit Current (Isc) [A] | 14.50 | 15.19 | 15.88 | 16.57 | 17.26 |
| Maximum Power Current (Imp) [A] | 13.84 | 14.48 | 15.15 | 15.77 | 16.43 |

## Temperature Coefficients

|                                 |            |
|---------------------------------|------------|
| Temperature Coefficient of Isc  | +0.045%/°C |
| Temperature Coefficient of Voc  | -0.260%/°C |
| Temperature Coefficient of Pmax | -0.290%/°C |
| NMOT                            | 45±2°C     |

## Engineering Design



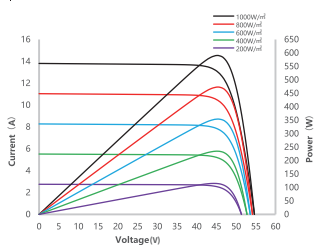
## Mechanical Characteristics

|                 |                                                                                                  |
|-----------------|--------------------------------------------------------------------------------------------------|
| Cell Type       | N-Type                                                                                           |
| Number of Cells | 144 (6x24)                                                                                       |
| Dimensions      | 2278X1134X30mm                                                                                   |
| Weight          | 31.2kg                                                                                           |
| Glass           | Front Glass, 2.0mm AR coated semi-tempered glass<br>Back Glass, 2.0mm glazed semi-tempered glass |
| Frame           | Anodized Aluminum Alloy                                                                          |
| Output Cables   | 4mm <sup>2</sup> (IEC), 12AWG (UL), 300mm (including connector) or 1200mm (including connector)  |
| Junction Box    | IP68 Rated, 3 diodes                                                                             |
| Connector       | PC-SS01 / PC-SS02 / MC4-EVO2 / MC4-EVO2A                                                         |
| Packaging       | 36 Pieces / Pallet, 720 Pieces / 40' Container                                                   |

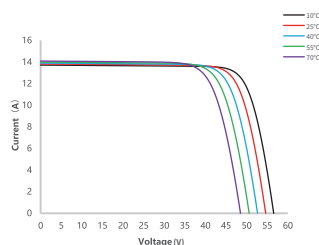
Frame color and cable length are subject to the actual order

## Characteristics

I-V/P-V Curve at Different Irradiation  
SS8-72HD-590N



I-V Curve at Different Temperature  
SS8-72HD-590N



## Operating Conditions

|                            |               |
|----------------------------|---------------|
| Maximum System Voltage     | 1500V DC(IEC) |
| Power Tolerance            | 0~+3%         |
| Operating Temperature      | -40°C~+85°C   |
| Maximum Series Fuse Rating | 30A           |
| Mechanical Load Front Rear | 5400Pa        |
| Mechanical Load Back Rear  | 2400Pa        |
| Bifaciality                | 80±10%        |



SolarSpace Technology Co., Ltd.

Specifications included in this datasheet are subject to change without notice.  
SolarSpace reserves the right of final interpretation.

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