

# 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 55GW+ capacity of solar cell and ~8GW capacity of solar module in China and overseas.

\*Please refer to SolarSpace for details

## SS8-60HD

## 470-495N

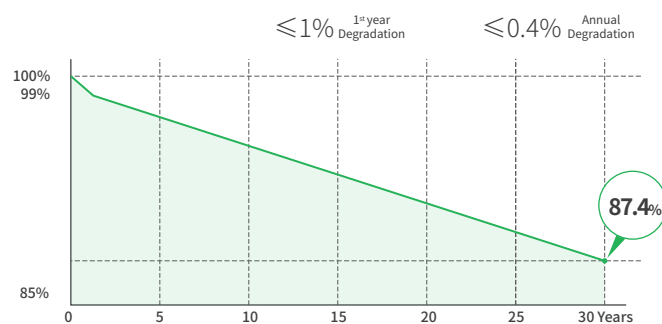
N-Type Bifacial Dual Glass Module

# 495W

Maximum  
Power Output

# 22.87%

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                     | SS8-60HD<br>-470N | SS8-60HD<br>-475N | SS8-60HD<br>-480N | SS8-60HD<br>-485N | SS8-60HD<br>-490N | SS8-60HD<br>-495N |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Maximum Power (Pmax) [W]        | 470               | 475               | 480               | 485               | 490               | 495               |
| Open-Circuit Voltage (Voc) [V]  | 42.35             | 42.51             | 42.68             | 42.85             | 43.02             | 43.19             |
| Maximum Power Voltage (Vmp) [V] | 35.03             | 35.19             | 35.35             | 35.51             | 35.67             | 35.83             |
| Short-Circuit Current (Isc) [A] | 14.16             | 14.24             | 14.32             | 14.40             | 14.48             | 14.56             |
| Maximum Power Current (Imp) [A] | 13.42             | 13.50             | 13.58             | 13.66             | 13.74             | 13.82             |
| Module Efficiency               | 21.71%            | 21.94%            | 22.17%            | 22.40%            | 22.63%            | 22.87%            |

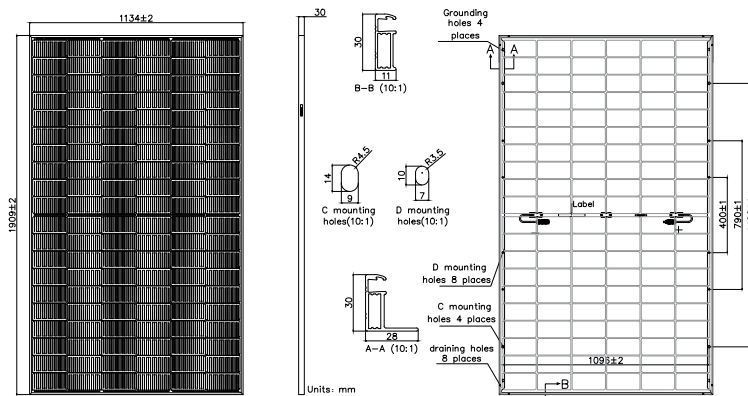
Irradiation 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Electric Characteristics (BNPI)

| Module Type                     | SS8-60HD<br>-470N | SS8-60HD<br>-475N | SS8-60HD<br>-480N | SS8-60HD<br>-485N | SS8-60HD<br>-490N | SS8-60HD<br>-495N |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Maximum Power (Pmax) [W]        | 520               | 525               | 530               | 535               | 540               | 545               |
| Open-Circuit Voltage (Voc)[V]   | 42.35             | 42.51             | 42.68             | 42.85             | 43.02             | 43.19             |
| Maximum Power Voltage (Vmp) [V] | 35.03             | 35.19             | 35.35             | 35.51             | 35.67             | 35.83             |
| Short-Circuit Current (Isc)[A]  | 15.78             | 15.86             | 15.94             | 16.02             | 16.10             | 16.19             |
| Maximum Power Current (Imp) [A] | 14.96             | 15.03             | 15.10             | 15.17             | 15.24             | 15.31             |

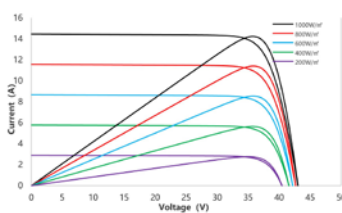
Irradiance Front: 1000 W/m<sup>2</sup> Rear:135 W/m<sup>2</sup>, Cell Temperature 25 °C, AM=1.5

## Engineering Design

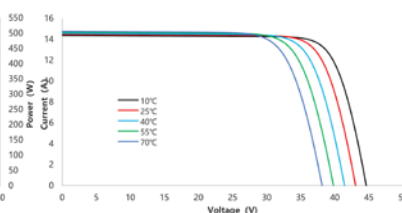


## Characteristics

I-V/P-V Curve at Different Irradiation  
SS8-60HD-490N



I-V Curve at Different Temperature  
SS8-60HD-490N



## Bifacial Output-Rearside Power Gain (490W)

| Power Gain                      | 5%    | 10%   | 15%   | 20%   | 25%   |
|---------------------------------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax) [W]        | 515   | 539   | 564   | 588   | 613   |
| Open-Circuit Voltage (Voc) [V]  | 43.02 | 43.02 | 43.02 | 43.02 | 43.02 |
| Maximum Power Voltage (Vmp) [V] | 35.67 | 35.67 | 35.67 | 35.67 | 35.67 |
| Short-Circuit Current (Isc) [A] | 15.20 | 15.93 | 16.65 | 17.38 | 18.10 |
| Maximum Power Current (Imp) [A] | 14.43 | 15.11 | 15.80 | 16.49 | 17.18 |

## 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     |

## Mechanical Characteristics

|                 |                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------|
| Cell Type       | N-Type                                                                                        |
| Number of Cells | 120 (6x20)                                                                                    |
| Dimensions      | 1909X1134X30mm                                                                                |
| Weight          | 25.0kg                                                                                        |
| Glass           | Front glass, 2.0mm coated semi-tempered glass<br>Back Glass, 2.0mm glazed semi-tempered glass |
| Frame           | Anodized Aluminum Alloy                                                                       |
| Output Cables   | 4mm² (IEC), 300mm (including connector)                                                       |
| Junction Box    | IP68 Rated, 3 diodes                                                                          |
| Connector       | PC-SS01 / PC-SS02 / MC4-EVO2 / MC4-EVO2A                                                      |
| Packaging       | 36 Pieces / Pallet, 864 Pieces / 40' HQ Container                                             |

Frame color and cable length are subject to the actual order

## 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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