



# Lumina II



## High Power Output

With 210 large wafer technology and slicing technology, multi-grid technology, high-density module packaging to ensure higher power output of modules



## 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 7.2GW capacity of solar module in China and overseas.

\*Please refer to SolarSpace for details

## SS9-66HD

## 680-710N

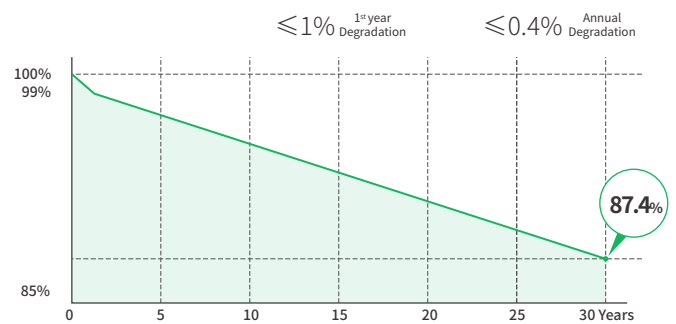
N-Type Bifacial Dual Glass Module

# 710W

# 22.86%

Maximum Power Output

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                     | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|
|                                 | -680N    | -685N    | -690N    | -695N    | -700N    | -705N    | -710N    |
| Maximum Power (Pmax) [W]        | 680      | 685      | 690      | 695      | 700      | 705      | 710      |
| Open-Circuit Voltage (Voc)[V]   | 47.50    | 47.90    | 48.10    | 48.30    | 48.20    | 48.40    | 48.60    |
| Maximum Power Voltage (Vmp) [V] | 39.70    | 39.90    | 40.10    | 40.30    | 40.50    | 40.70    | 40.90    |
| Short-Circuit Current (Isc)[A]  | 18.17    | 18.20    | 18.24    | 18.28    | 18.32    | 18.36    | 18.40    |
| Maximum Power Current (Imp) [A] | 17.14    | 17.18    | 17.21    | 17.25    | 17.29    | 17.33    | 17.36    |
| Module Efficiency               | 21.89%   | 22.05    | 22.21%   | 22.37%   | 22.53%   | 22.70%   | 22.86%   |

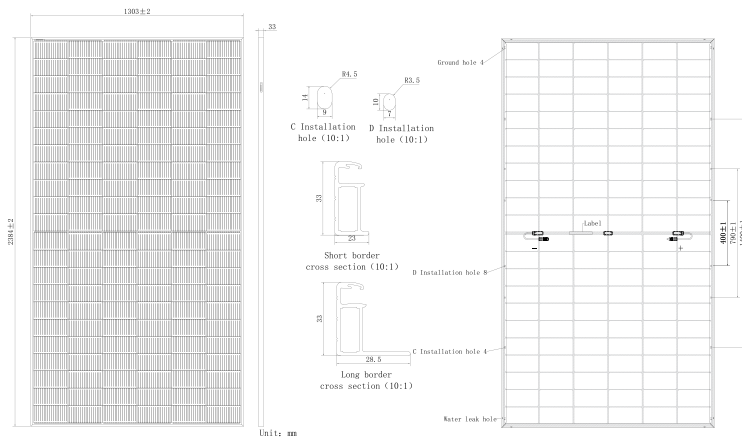
Irradiation 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Electric Characteristics (NMOT)

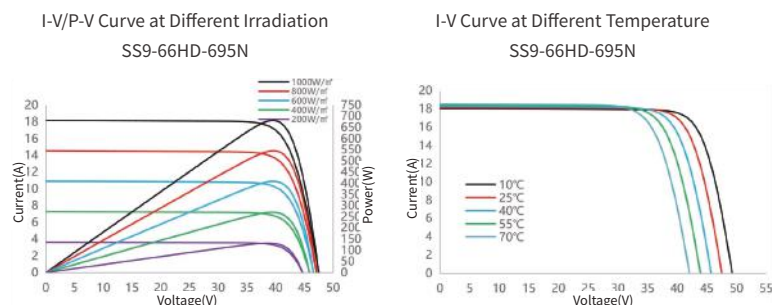
| Module Type                     | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD | SS9-66HD |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|
|                                 | -680N    | -685N    | -690N    | -695N    | -700N    | -705N    | -710N    |
| Maximum Power (Pmax) [W]        | 518      | 522      | 526      | 530      | 534      | 538      | 542      |
| Open-Circuit Voltage (Voc)[V]   | 44.80    | 45.10    | 45.30    | 45.50    | 45.70    | 45.90    | 46.10    |
| Maximum Power Voltage (Vmp) [V] | 37.00    | 37.20    | 37.40    | 37.60    | 37.80    | 38.00    | 38.20    |
| Short-Circuit Current (Isc)[A]  | 14.66    | 14.68    | 14.72    | 14.76    | 14.80    | 14.84    | 14.88    |
| Maximum Power Current (Imp) [A] | 14.01    | 14.04    | 14.07    | 14.10    | 14.13    | 14.16    | 14.19    |

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

## Engineering Design



## Characteristics



**Solarspace Technology Co., Ltd.**

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

## Bifacial Output-Rearside Power Gain <sup>(695W)</sup>

| Power Gain                      | 5%    | 10%   | 15%   | 20%   | 25%   |
|---------------------------------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax) [W]        | 730   | 765   | 799   | 834   | 869   |
| Open-Circuit Voltage (Voc)[V]   | 47.90 | 47.90 | 47.90 | 48.00 | 48.00 |
| Maximum Power Voltage (Vmp) [V] | 40.30 | 40.30 | 40.30 | 40.40 | 40.40 |
| Short-Circuit Current (Isc)[A]  | 18.84 | 19.56 | 20.25 | 20.98 | 21.69 |
| Maximum Power Current (Imp) [A] | 18.12 | 18.99 | 19.83 | 20.65 | 21.51 |

## 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 | 132(6x22)   |
| Dimensions      | 2384X1303X33mm  |
| Weight          | 37.5kg  |
| Glass           | Front glass, 2.0mm 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)                                 |
| Junction Box    | IP68 Rated, 3 diodes  |
| Connector       | MC4-EVO2 or MC4 Compatible  |
| Packaging       | 33 Pieces/Pallet, 594 pieces/40' 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%         |