

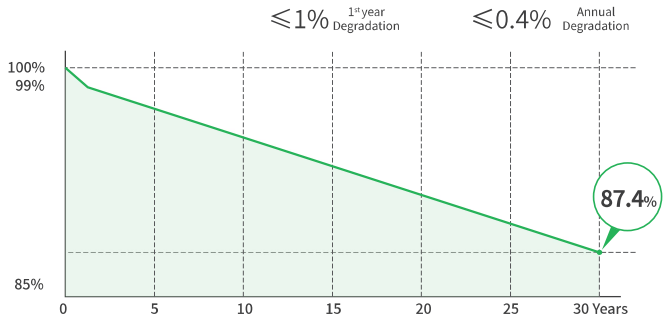

# Lumina II

## SS8-72HD 570-595N

N-Type Bifacial Dual Glass Module

**595W**
Maximum
Power Output

**23.03%**
Maximum
Module Efficiency




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

### 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% 1st 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

### 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 -570N | SS8-72HD -575N | SS8-72HD -580N | SS8-72HD -585N | SS8-72HD -590N | SS8-72HD -595N |
|---|---|---|---|---|---|---|
| Maximum Power (Pmax) [W] | 570 | 575 | 580 | 585 | 590 | 595 |
| Open-Circuit Voltage (Voc) [V] | 53.55 | 53.82 | 54.09 | 54.36 | 54.63 | 54.90 |
| Maximum Power Voltage (Vmp) [V] | 43.95 | 44.17 | 44.39 | 44.61 | 44.83 | 45.05 |
| Short-Circuit Current (Isc) [A] | 13.61 | 13.66 | 13.71 | 13.76 | 13.81 | 13.86 |
| Maximum Power Current (Imp) [A] | 12.97 | 13.02 | 13.07 | 13.12 | 13.17 | 13.21 |
| Module Efficiency | 22.07% | 22.26% | 22.45% | 22.65% | 22.84% | 23.03% |

Irradiation 1000W/m², Cell Temperature 25°C, 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 |

## Electric Characteristics (BNPI)

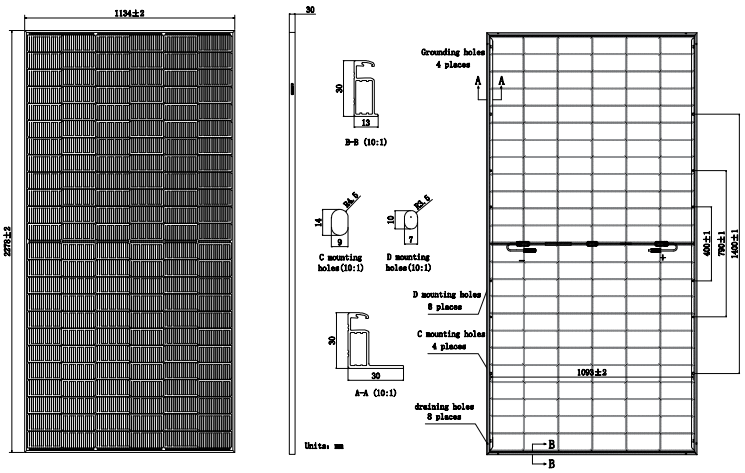
| Module Type | SS8-72HD -570N | SS8-72HD -575N | SS8-72HD -580N | SS8-72HD -585N | SS8-72HD -590N | SS8-72HD -595N |
|---|---|---|---|---|---|---|
| Maximum Power (Pmax) [W] | 630 | 635 | 640 | 645 | 650 | 655 |
| Open-Circuit Voltage (Voc) [V] | 53.55 | 53.82 | 54.09 | 54.36 | 54.63 | 54.90 |
| Maximum Power Voltage (Vmp) [V] | 43.95 | 44.17 | 44.39 | 44.61 | 44.83 | 45.05 |
| Short-Circuit Current (Isc) [A] | 15.06 | 15.10 | 15.14 | 15.18 | 15.22 | 15.26 |
| Maximum Power Current (Imp) [A] | 14.43 | 14.47 | 14.51 | 14.55 | 14.59 | 14.63 |

Irradiance Front: 1000 W/m² Rear:135 W/m² , Cell Temperature 25 °C, AM=1.5

## 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



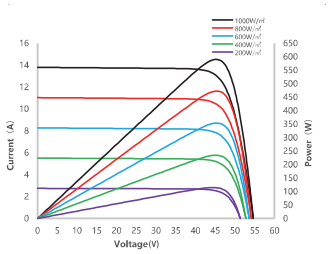

## Mechanical Characteristics

| | |
|---|---|
| Cell Type | N-Type |
| Number of Cells | 144 (6x24) |
| Dimensions | 2278X1134X30mm |
| Weight | 31.2kg |
| Glass | Front Glass, 2.0mm AR coated semi-tempered glass |
| | 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, 720 Pieces / 40' HQ Container |

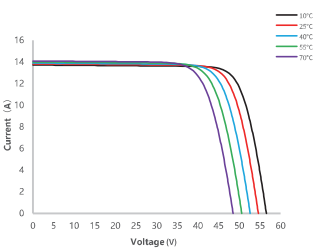
Frame color and cable length are subject to the actual order

## 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% |