

# Lumina I



430W

Maximum **Power Output**  22.0%

Maximum Module Efficiency

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 30GW+ capacity of solar cell and 5.7GW capacity of solar module in China and overseas.

## SS8-54HD 410-430N

## N-TOPCon Bifacial Dual Glass Module



## **Super Power Output**

SolarSpace advanced TOPCon cells combined with MBB and high-density encapsulation provides ultrahigh power output



#### **High Reliability**

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



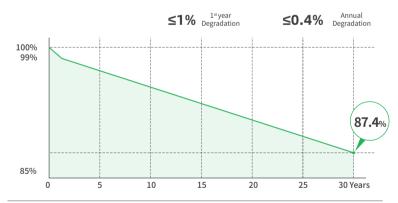
## Extra power generation

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



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

#### **Comprehensive Certificates**

- •IEC61215 •IEC61730 •IEC61701 •IFC62716 •DINEN60068
- •ISO9001:2015: Quality Management System
- •ISO14001:2015: Environment Management System
- •ISO45001:2018: Occupational Health and Safety Management Systems







## Electric Characteristics STC: Irradiation 1000W/m², Cell Temperature 25°C, AM=1.5

| Module Type                     | SS8-54HD<br>-410N | SS8-54HD<br>-415N | SS8-54HD<br>-420N | SS8-54HD<br>-425N | SS8-54HD<br>-430N |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Maximum Power (Pmax) [W]        | 410               | 415               | 420               | 425               | 430               |
| Open-Circuit Voltage (Voc)[V]   | 37.72             | 37.91             | 38.10             | 38.29             | 38.48             |
| Maximum Power Voltage (Vmp) [V] | 31.12             | 31.31             | 31.50             | 31.69             | 31.87             |
| Short-Circuit Current (lsc)[A]  | 13.92             | 14.00             | 14.08             | 14.16             | 14.24             |
| Maximum Power Current (Imp) [A] | 13.18             | 13.26             | 13.34             | 13.42             | 13.50             |
| Module Efficiency               | 21.00%            | 21.25%            | 21.51%            | 21.76%            | 22.02%            |
| Power Tolerance                 | 0~+5W             |                   |                   |                   |                   |
| Temperature coefficient of Isc  | +0.046%/°C        |                   |                   |                   |                   |
| Temperature coefficient of Voc  | -0.250%/°C        |                   |                   |                   |                   |
| Temperature coefficient of Pmax | -0.300%/°C        |                   |                   |                   |                   |

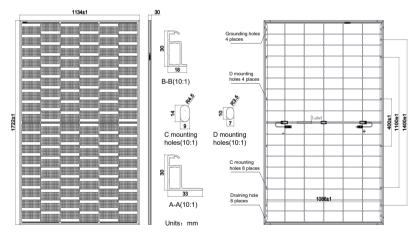
## Bifacial Output-Rearside Power Gain (420 W)

| Power Gain                      | 5%    | 10%   | 15%   | 20%   | 25%   |
|---------------------------------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax) [W]        | 441   | 462   | 483   | 504   | 525   |
| Open-Circuit Voltage (Voc)[V]   | 38.10 | 38.10 | 38.10 | 38.20 | 38.20 |
| Maximum Power Voltage (Vmp) [V] | 31.50 | 31.50 | 31.50 | 31.60 | 31.60 |
| Short-Circuit Current (lsc)[A]  | 14.51 | 15.06 | 15.60 | 16.16 | 16.71 |
| Maximum Power Current (Imp) [A] | 14.01 | 14.68 | 15.35 | 15.96 | 16.62 |

## **Mechanical Characteristics**

| empered glass    |
|------------------|
| ered glass       |
|                  |
| ustomized Length |
|                  |
|                  |
| 0' container     |
|                  |

## **Engineering Design**



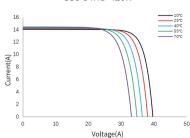
## **Operating Conditions**

| Maximum System Voltage             | 1500V DC(IEC) |  |  |
|------------------------------------|---------------|--|--|
| Operating Temperature              | -40°C~+85°C   |  |  |
| Maximum Series Fuse Rating         | 30A           |  |  |
| Mechanical Load Front Rear         | 5400Pa        |  |  |
| Mechanical Load Back Rear          | 2400Pa        |  |  |
| Nominal operating cell temperature | 45±2°C        |  |  |
| Bifaciality                        | 80±5%         |  |  |
| Safety Class                       | Class II      |  |  |
| Fire Rating                        | Class A       |  |  |

## Characteristics

I-V/P-V Curve at Different Irradiation SS8-54HD-420N 15 25 30 40 20 35 Voltage(A)

I-V Curve at Different Temperature SS8-54HD-420N





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