

# 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 60W+ capacity of solar cell and ~10GW capacity of solar module in China and overseas.

\*Please refer to SolarSpace for details

**SSA-54HDB 485-500N**

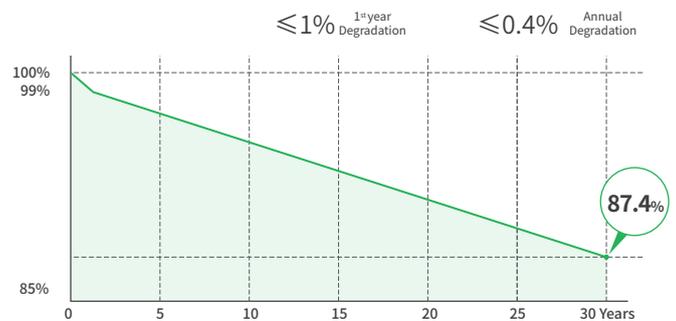
All Black Module

**500W**

Maximum Power Output

**22.48%**

Maximum Module Efficiency



**25**Years Product Warranty **30**Years Linear Power Warranty

### Comprehensive Certificates

- IEC61215 • IEC61730 • UL61215 • UL61730
- 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	SSA-54HDB -485N	SSA-54HDB -490N	SSA-54HDB -495N	SSA-54HDB -500N
Maximum Power (Pmax) [W]	485	490	495	500
Open-Circuit Voltage (Voc) [V]	39.52	39.72	39.92	40.12
Maximum Power Voltage (Vmp) [V]	32.72	32.92	33.12	33.32
Short-Circuit Current (Isc) [A]	15.76	15.79	15.82	15.85
Maximum Power Current (Imp) [A]	14.84	14.90	14.96	15.02
Module Efficiency	21.81%	22.03%	22.26%	22.48%

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

### Bifacial Output-Rearside Power Gain (495W)

Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax) [W]	519	544	569	594	619
Open-Circuit Voltage (Voc) [V]	39.92	39.92	39.92	40.02	40.02
Maximum Power Voltage (Vmp) [V]	33.12	33.12	33.12	33.22	33.22
Short-Circuit Current (Isc) [A]	16.55	17.33	18.14	18.87	19.70
Maximum Power Current (Imp) [A]	15.69	16.44	17.18	17.89	18.64

### Electric Characteristics (NMOT)

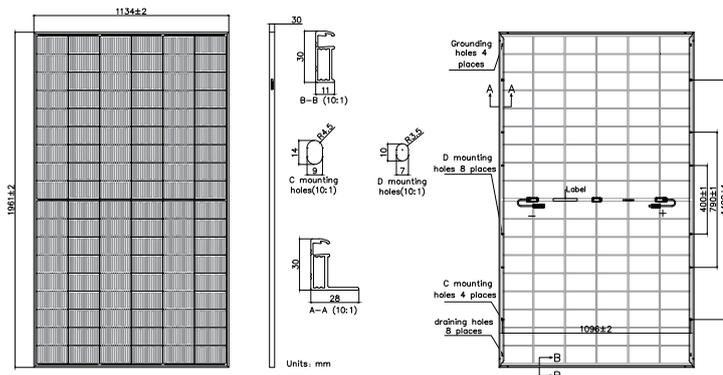
Module Type	SSA-54HDB -485N	SSA-54HDB -490N	SSA-54HDB -495N	SSA-54HDB -500N
Maximum Power (Pmax) [W]	370	374	378	382
Open-Circuit Voltage (Voc) [V]	37.99	38.07	38.15	38.23
Maximum Power Voltage (Vmp) [V]	30.73	31.00	31.27	31.54
Short-Circuit Current (Isc) [A]	12.73	12.75	12.77	12.79
Maximum Power Current (Imp) [A]	12.05	12.08	12.11	12.14

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

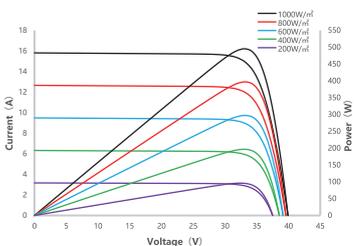


### Mechanical Characteristics

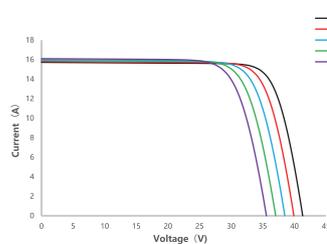
Cell Type	N-Type
Number of Cells	108 (6x18)
Dimensions	1961X1134X30mm
Weight	26.5kg
Glass	Front glass, 2.0mm coated semi-tempered glass Back Glass, 2.0mm glazed semi-tempered glass
Frame	Black, Anodized Aluminum Alloy
Output Cables	4mm <sup>2</sup> (IEC), 12AWG(UL), 300mm(including connector) or Customized Length
Junction Box	IP68 Rated, 3 diodes
Connector	PC-SS01 / PC-SS02 / MC4-EVO2 / MC4-EVO2A
Packaging	36 Pieces / Pallet, 864 pieces / 40' container

### Characteristics

I-V/P-V Curve at Different Irradiation  
SSA-54HDB-495N



I-V Curve at Different Temperature  
SSA-54HDB-495N



### Operating Conditions

Maximum System Voltage	1500V DC (UL)
Power Tolerance	0~+3%
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	35A
Mechanical Load Front Rear	5400Pa
Mechanical Load Back Rear	2400Pa
Bifaciality	80 ± 10%

