

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

\*Please refer to SolarSpace for details

## SSA-54HD      485-505N

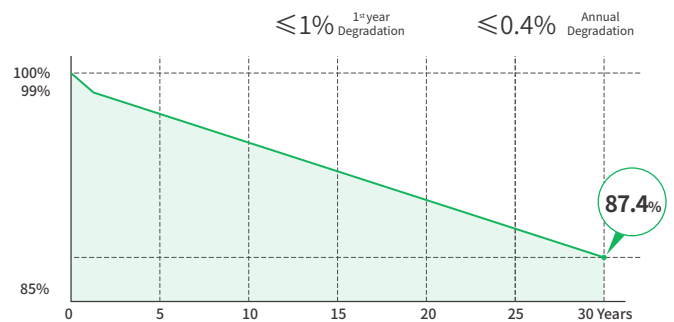
N-Type Bifacial Dual Glass Module

# 505W

Maximum Power Output

# 22.71%

Maximum Module Efficiency



**12**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-54HD	SSA-54HD	SSA-54HD	SSA-54HD	SSA-54HD
	-485N	-490N	-495N	-500N	-505N
Maximum Power (Pmax) [W]	485	490	495	500	505
Open-Circuit Voltage (Voc)[V]	39.52	39.72	39.92	40.12	40.32
Maximum Power Voltage (Vmp) [V]	32.72	32.92	33.12	33.32	33.52
Short-Circuit Current (Isc)[A]	15.76	15.79	15.82	15.85	15.88
Maximum Power Current (Imp) [A]	14.84	14.90	14.96	15.02	15.08
Module Efficiency	21.81%	22.03%	22.26%	22.48%	22.71%

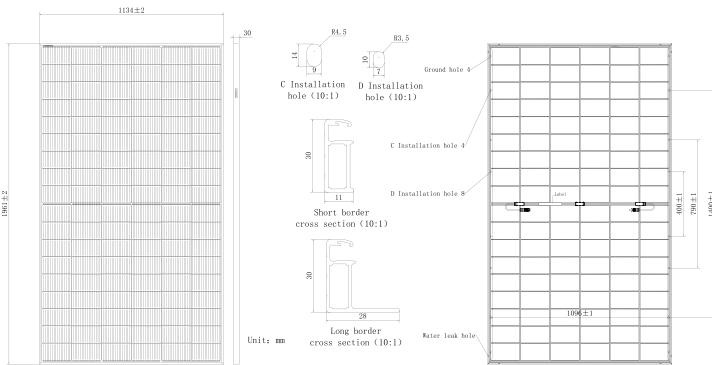
Irradiation 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Electric Characteristics (NMOT)

Module Type	SSA-54HD	SSA-54HD	SSA-54HD	SSA-54HD	SSA-54HD
	-485N	-490N	-495N	-500N	-505N
Maximum Power (Pmax) [W]	370	374	378	382	386
Open-Circuit Voltage (Voc)[V]	37.99	38.07	38.15	38.23	38.31
Maximum Power Voltage (Vmp) [V]	30.73	31.00	31.27	31.54	31.81
Short-Circuit Current (Isc)[A]	12.73	12.75	12.77	12.79	12.81
Maximum Power Current (Imp) [A]	12.05	12.08	12.11	12.14	12.16

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

## Engineering Design



## 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

## 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

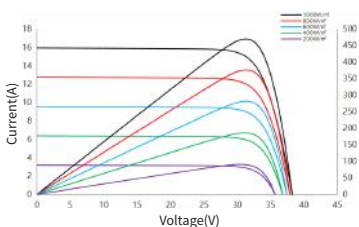
## Mechanical Characteristics

Cell Type	N-Type
Number of Cells	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	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	36 Pieces/Pallet, 864 pieces/40' container

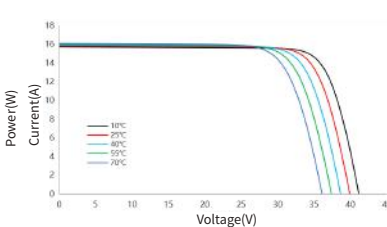
Frame color and cable length are subject to the actual order

## Characteristics

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



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



## 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%

