

# Lumina II



## Super Power Output

SolarSpace advanced TOPCon 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



## Aesthetic Design

All black design brings highly consistent appearance for rooftops

**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 58.75GW+ capacity of solar cell and 5.7GW capacity of solar module in China and overseas.

\*Please refer to SolarSpace for details

## SS8-54HDB 420-440N

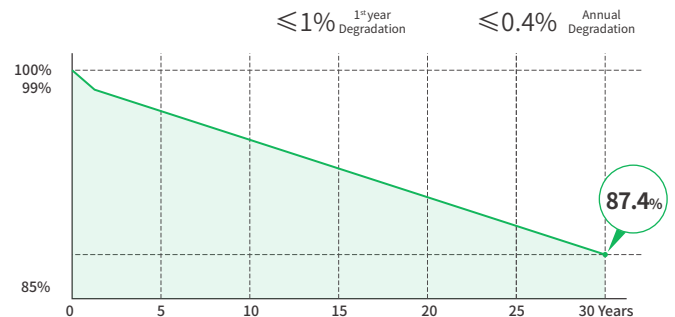
All Black Module

# 440W

Maximum Power Output

# 22.53%

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	SS8-54HDB	SS8-54HDB	SS8-54HDB	SS8-54HDB	SS8-54HDB
	-420N	-425N	-430N	-435N	-440N
Maximum Power (Pmax) [W]	420	425	430	435	440
Open-Circuit Voltage (Voc)[V]	37.89	38.08	38.27	38.46	38.65
Maximum Power Voltage (Vmp) [V]	31.85	32.03	32.21	32.37	32.55
Short-Circuit Current (Isc)[A]	13.99	14.07	14.13	14.21	14.29
Maximum Power Current (Imp) [A]	13.19	13.28	13.36	13.44	13.52
Module Efficiency	21.51%	21.76%	22.02%	22.28%	22.53%

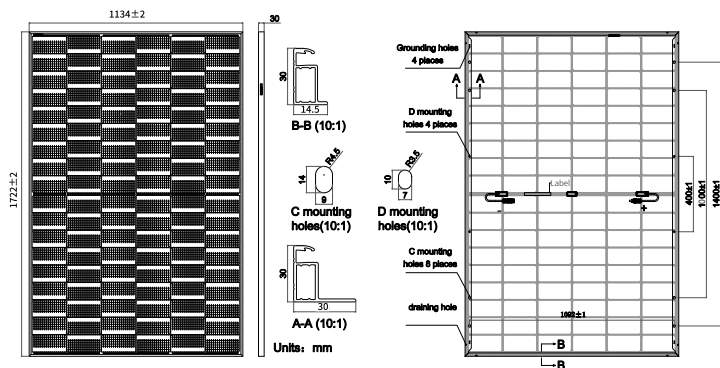
Irradiation 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

### Electric Characteristics (NMOT)

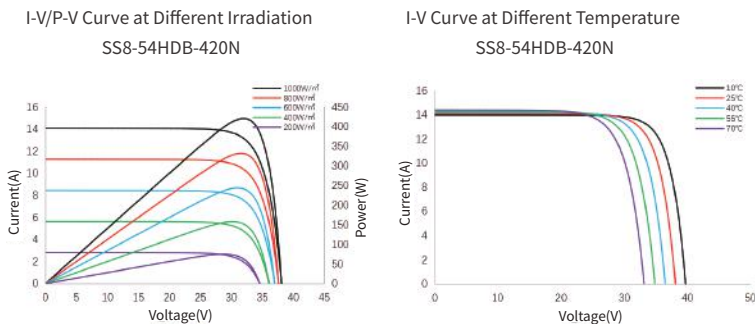
Module Type	SS8-54HDB	SS8-54HDB	SS8-54HDB	SS8-54HDB	SS8-54HDB
	-420N	-425N	-430N	-435N	-440N
Maximum Power (Pmax) [W]	319	323	327	331	335
Open-Circuit Voltage (Voc)[V]	36.42	36.60	36.78	36.96	37.14
Maximum Power Voltage (Vmp) [V]	29.99	30.17	30.34	30.52	30.69
Short-Circuit Current (Isc)[A]	11.40	11.47	11.54	11.61	11.68
Maximum Power Current (Imp) [A]	10.64	10.71	10.78	10.85	10.92

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

### Engineering Design



### Characteristics



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

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]	31.94	31.94	31.94	31.95	31.95
Short-Circuit Current (Isc)[A]	14.51	15.06	15.60	16.16	16.71
Maximum Power Current (Imp) [A]	13.81	14.47	15.13	15.78	16.44

### 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-TOPCon
Number of Cells	108(6x18)
Dimensions	1722X1134X30mm
Weight	24.0kg
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	MC4-EVO2 or MC4 Compatible
Packaging	36 Pieces/Pallet, 936 pieces/40' container

### 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%

