

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% 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

SS8-54HD

425-445N

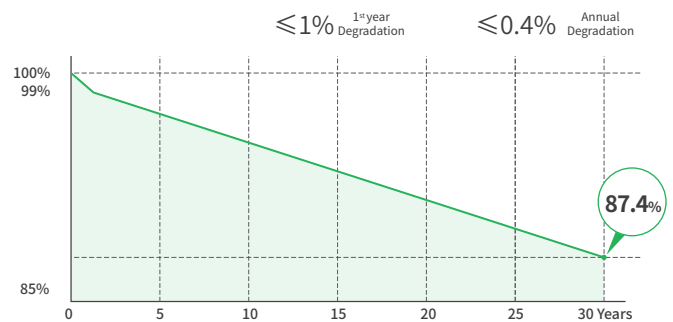
N-Type Bifacial Dual Glass Module

445W

Maximum
Power Output

22.79%

Maximum
Module Efficiency



15Years 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	SS8-54HD -425N	SS8-54HD -430N	SS8-54HD -435N	SS8-54HD -440N	SS8-54HD -445N
Maximum Power (Pmax) [W]	425	430	435	440	445
Open-Circuit Voltage (Voc) [V]	38.08	38.27	38.46	38.65	38.84
Maximum Power Voltage (Vmp) [V]	32.03	32.21	32.37	32.55	32.73
Short-Circuit Current (Isc) [A]	14.07	14.13	14.21	14.29	14.37
Maximum Power Current (Imp) [A]	13.28	13.36	13.44	13.52	13.60
Module Efficiency	21.76%	22.02%	22.28%	22.53%	22.79%

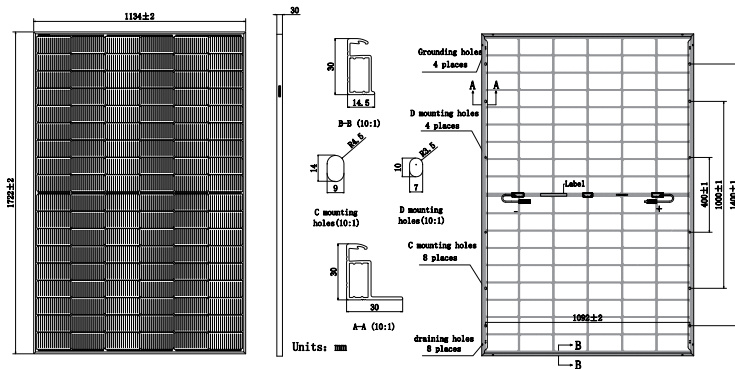
Irradiation 1000W/m², Cell Temperature 25°C, AM=1.5

Electric Characteristics (BNPI)

Module Type	SS8-54HD -425N	SS8-54HD -430N	SS8-54HD -435N	SS8-54HD -440N	SS8-54HD -445N
Maximum Power (Pmax) [W]	470	475	480	485	490
Open-Circuit Voltage (Voc)[V]	38.08	38.27	38.46	38.65	38.84
Maximum Power Voltage (Vmp) [V]	32.03	32.21	32.37	32.55	32.73
Short-Circuit Current (Isc) [A]	15.66	15.73	15.80	15.87	15.94
Maximum Power Current (Imp) [A]	14.79	14.86	14.93	15.00	15.07

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

Engineering Design



Bifacial Output-Rearside Power Gain (425W)

Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax) [W]	446	468	489	510	531
Open-Circuit Voltage (Voc) [V]	38.29	38.29	38.29	38.39	38.39
Maximum Power Voltage (Vmp) [V]	32.12	32.12	32.12	32.13	32.13
Short-Circuit Current (Isc) [A]	14.59	15.15	15.69	16.25	16.81
Maximum Power Current (Imp) [A]	13.89	14.58	15.23	15.88	16.53

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

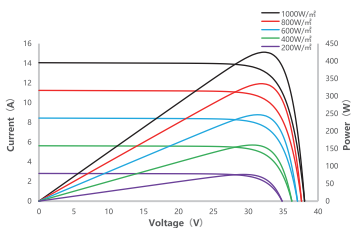
Mechanical Characteristics

Cell Type	N-Type
Number of Cells	108 (6x18)
Dimensions	1722X1134X30mm
Weight	24.0kg
Glass	Front glass, 2.0mm coated semi-tempered glass Back Glass, 2.0mm glazed semi-tempered glass
Frame	Anodized Aluminum Alloy
Output Cables	4mm ² (IEC), 300mm (including connector)
Junction Box	IP68 Rated, 3 diodes
Connector	PC-SS01 / PC-SS02 / MC4-EVO2 / MC4-EVO2A
Packaging	36 Pieces / Pallet, 936 Pieces / 40' HQ Container

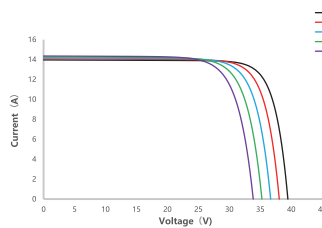
Frame color and cable length are subject to the actual order

Characteristics

I-V/P-V Curve at Different Irradiation
SS8-54HD-425N



I-V Curve at Different Temperature
SS8-54HD-425N



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%



SolarSpace Technology Co., Ltd.

Specifications included in this datasheet are subject to change without notice.
SolarSpace reserves the right of final interpretation.

www.solarspace.com contact@solarspace.com

Version No: EU 202608