



# Lumina I



## High Power Output

Solarspace efficient cells with MBB and high-density encapsulation ensures higher power output



## High Reliability

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



## More Power Generation

Gallium doped wafers reduce annual power degradation, optimized circuit design ensures more power generation under shading



## 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 50GW+ capacity of solar cell and 5.7GW capacity of solar module in China and overseas.

\*Please refer to SolarSpace for details

## SS8-54HD

## 395-415M

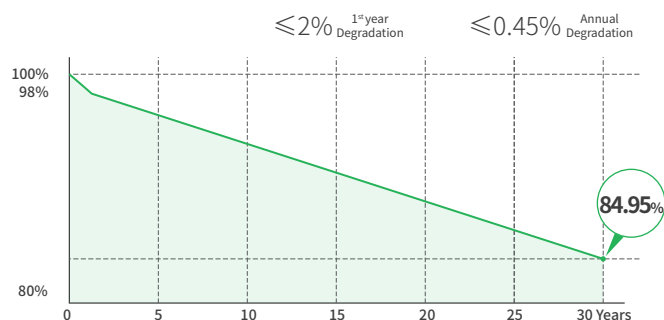
### Bifacial Dual Glass Module

# 415W

Maximum Power Output

# 21.25%

Maximum Module Efficiency



**12**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	SS8-54HD -395M	SS8-54HD -400M	SS8-54HD -405M	SS8-54HD -410M	SS8-54HD -415M
Maximum Power (Pmax) [W]	395	400	405	410	415
Open-Circuit Voltage (Voc)[V]	36.98	37.07	37.23	37.32	37.45
Maximum Power Voltage (Vmp) [V]	30.84	31.01	31.21	31.45	31.61
Short-Circuit Current (Isc)[A]	13.70	13.79	13.87	13.95	14.02
Maximum Power Current (Imp) [A]	12.81	12.90	12.98	13.04	13.13
Module Efficiency	20.23%	20.48%	20.74%	21.00%	21.25%

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

## Bifacial Output-Rearside Power Gain (410 W)

Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax) [W]	431	451	472	492	513
Open-Circuit Voltage (Voc)[V]	37.33	37.33	37.33	37.34	38.34
Maximum Power Voltage (Vmp) [V]	31.46	31.46	31.46	31.47	31.47
Short-Circuit Current (Isc)[A]	14.62	15.32	16.02	16.72	17.41
Maximum Power Current (Imp) [A]	13.71	14.35	15.01	15.65	16.31

## Electric Characteristics (NMOT)

Module Type	SS8-54HD -395M	SS8-54HD -400M	SS8-54HD -405M	SS8-54HD -410M	SS8-54HD -415M
Maximum Power (Pmax) [W]	298	302	306	310	314
Open-Circuit Voltage (Voc)[V]	34.75	34.88	35.12	35.23	35.37
Maximum Power Voltage (Vmp) [V]	29.08	29.27	29.49	29.72	29.89
Short-Circuit Current (Isc)[A]	10.96	11.03	11.10	11.16	11.22
Maximum Power Current (Imp) [A]	10.25	10.32	10.38	10.44	10.51

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

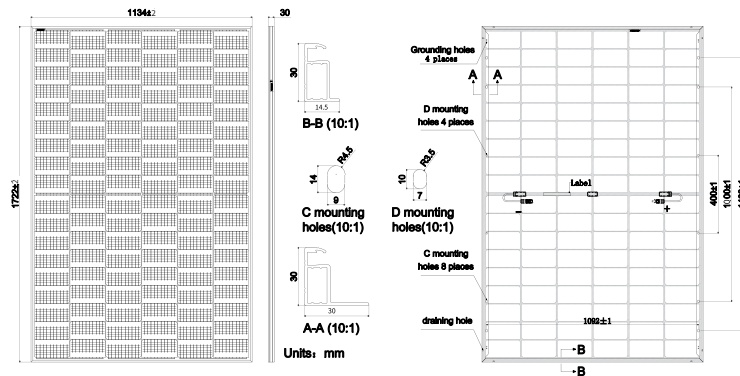
## Temperature coefficients

Temperature coefficient of Isc	+0.045%/°C
Temperature coefficient of Voc	-0.265%/°C
Temperature coefficient of Pmax	-0.334%/°C
NMOT	45±2°C

## Engineering Design

## Mechanical Characteristics

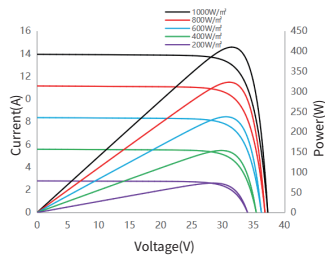
Cell Type	Mono PERC (M10)
Number of Cells	108(6x18)
Dimensions	1722X1134X30mm
Weight	24.0kg
Glass	Front Glass, 2.0mm AR coated semi-tempered glass Back Glass, 2.0mm glazed semi-tempered glass
Frame	Silver, Anodized Aluminum Alloy
Output Cables	4mm <sup>2</sup> (IEC),12AWG(UL), 300mm (including connector) or 1000mm(including connector) Customized Length
Junction Box	IP68 Rated, 3 diodes
Connector	MC4-EVO2 or MC4 Compatible
Packaging	36 Pieces/Pallet, 936 pieces/40' container



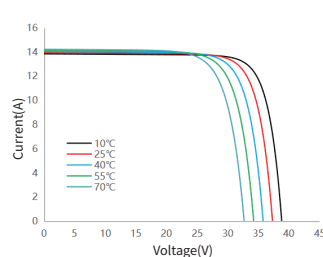
## Characteristics

## Operating Conditions

I-V/P-V Curve at Different Irradiation  
SS8-54HD -410M



I-V Curve at Different Temperature  
SS8-54HD -410M



Maximum System Voltage	1500V DC(IEC)
Power Tolerance	0~+3%
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	25A
Mechanical Load Front Rear	5400Pa
Mechanical Load Back Rear	2400Pa
Bifaciality	70±10%

