

# 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



## 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 60GW+ capacity of solar cell and 7.2GW capacity of solar module in China and overseas.

\*Please refer to SolarSpace for details

**SS8-54HSB 410-420M**

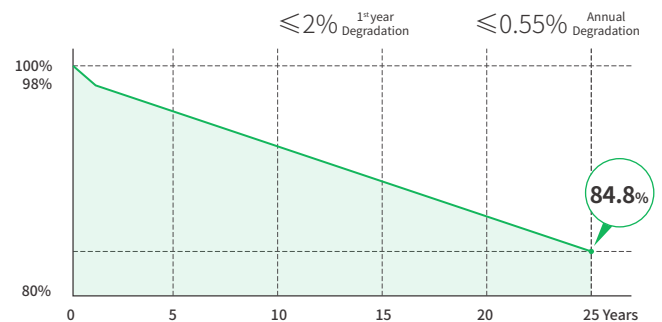
All Black Module

**420W**

Maximum  
Power Output

**21.51%**

Maximum  
Module Efficiency



**12** Years Product Warranty **25** 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	SS8-54HSB -410M	SS8-54HSB -415M	SS8-54HSB -420M
Maximum Power (Pmax) [W]	410	415	420
Open-Circuit Voltage (Voc)[V]	37.32	37.45	37.58
Maximum Power Voltage (Vmp) [V]	31.45	31.61	31.80
Short-Circuit Current (Isc)[A]	13.95	14.02	14.10
Maximum Power Current (Imp) [A]	13.04	13.13	13.21
Module Efficiency	21.00%	21.25%	21.51%

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

Temperature coefficients

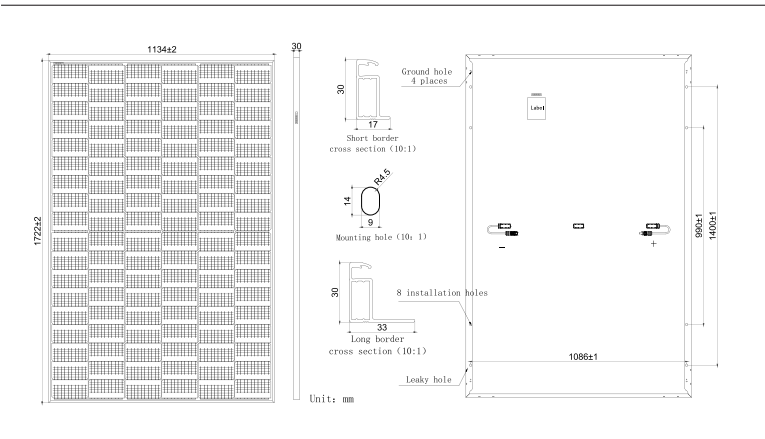
Temperature coefficient of Isc	+0.045%/°C
Temperature coefficient of Voc	-0.265%/°C
Temperature coefficient of Pmax	-0.335%/°C
NMOT	45±2°C

Electric Characteristics (NMOT)

Module Type	SS8-54HSB -410M	SS8-54HSB -415M	SS8-54HSB -420M
Maximum Power (Pmax) [W]	310	314	318
Open-Circuit Voltage (Voc)[V]	35.23	35.37	35.50
Maximum Power Voltage (Vmp) [V]	29.72	29.89	30.07
Short-Circuit Current (Isc)[A]	11.16	11.22	11.28
Maximum Power Current (Imp) [A]	10.44	10.51	10.59

Irradiance 800 W/m², Ambient Temperature 20 °C, Wind Speed 1 m/s, AM=1.5

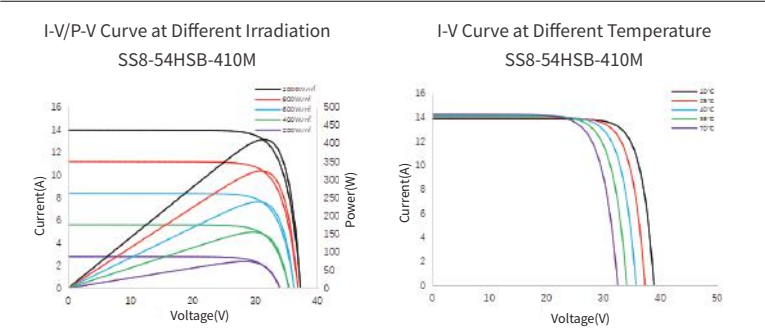
Engineering Design



Mechanical Characteristics

Cell Type	Mono PERC
Number of Cells	108(6x18)
Dimensions	1722X1134X30mm
Weight	21.0kg
Glass	Single glass, 3.2mm coated tempered glass
Frame	Black, Anodized Aluminum Alloy
Output Cables	4mm²(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

Characteristics



Operating Conditions

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

