

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 58.75GW+ 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

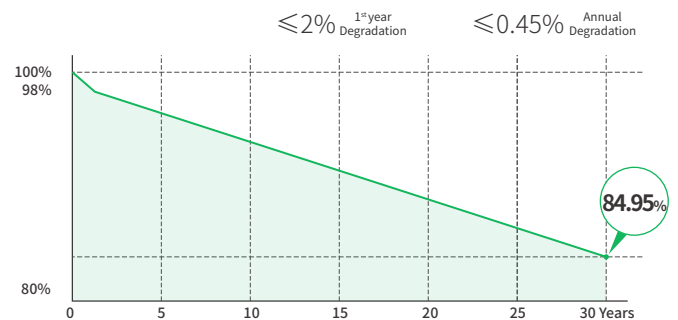
Bifacial Dual Glass Module

415W

Maximum Power Output

21.25%

Maximum Module Efficiency



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 -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/m², 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)

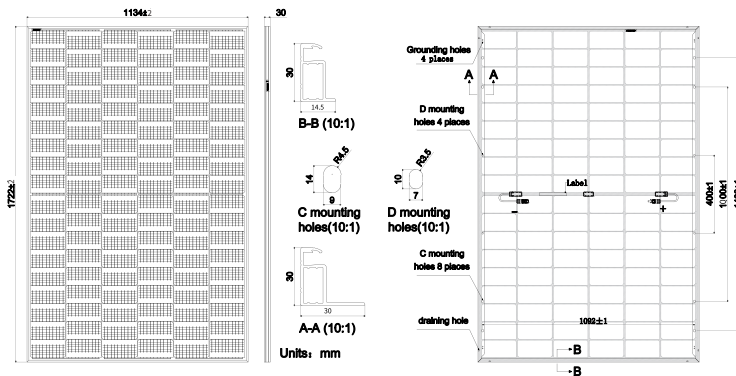
| Module Type | SS8-54HD -395M | SS8-54HD -400M | SS8-54HD -405M | SS8-54HD -410M | SS8-54HD -415M |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Maximum Power (Pmax) [W] | 298 | 302 | 306 | 310 | 314 |
| Open-Circuit 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/m², 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

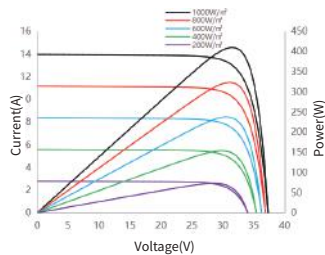


Mechanical Characteristics

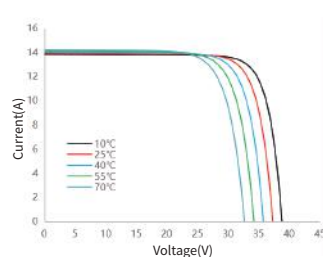
| | |
|-----------------|----------------------------------------------------------------------------------------------------------------|
| Cell Type | Mono PERC (M10) |
| Number of Cells | 108(6x18) |
| Dimensions | 1722X1134X30mm |
| Weight | 24.0kg |
| Glass | Front Glass, 2.0mm AR coated semi-tempered glass Back Glass, 2.0mm glazed semi-tempered glass |
| Frame | Silver, Anodized Aluminum Alloy |
| Output Cables | 4mm ² (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

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



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



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 |
| Bifaciality | 70±10% |

