

# BiMAX 6R

# 490-510W

SP510M-54H

N-Type TOPCon Bifacial  
Double-Glass Solar Module



22.93%

Max. Module Efficiency

## N-Type 182\*210mm Cell

Adopting the 182\*210mm N-Type TOPCon cells with the highest efficiency.

## Bifacial with Double-Glass

Module adopts 182\*210mm half cells, bifacial module provide an additional 5%~25% output.

## Load Capacity

Mechanical load tests including wind load 2400Pa and snow load 5400Pa done by TUV.

## PID Protection

Ensure the attenuation probability caused by PID phenomenon is minimized.

## Harsh Environmental Adaptability

Strict salt spray and ammonia corrosion test by TUV.

## Quality Management System and Product Certification

IEC61215/61730, IEC62804(PID), IEC61701(Salt),  
IEC62716 (Ammonia), IEC60068-2-68(Sand),  
ISO 9001:2015/quality management system,  
ISO 14001:2015/environmental management system,  
ISO 45001:2018/occupation health safety management system,  
ISO 50001:2011/energy management system,  
IEC TS 62941-2016/PV industry quality management system.

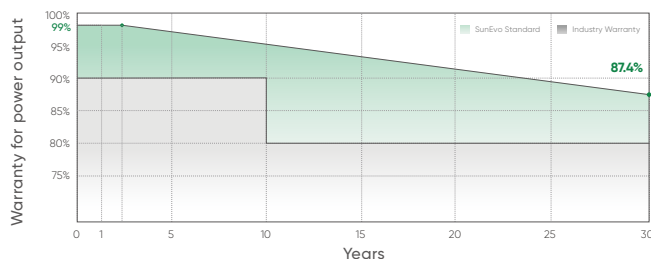
## Quality Guarantee

25 Years

Materials Warranty

30 Years

Power Warranty



## Mechanical Characteristics

Weight	27.7kg
Dimensions	1961×1134×30mm
Cell Dimensions	182×210mm
Cell Amount	54×2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Glass Thickness	(F) 2.0mm, Anti-Reflection Coating   (B) 2.0mm, Heat Strengthened Glass
Frame	Aluminum Alloy
Cable	4mm <sup>2</sup> , 300mm in length, length can be customized / UV resistant
Connector	MC4 Compatible
Bifaciality	80±5%
Packing	36pcs/box, 864pcs/40'HQ

## Electrical Parameters (STC\*)

Module Type: SP510M-54H	490	495	500	505	510
Maximum Power (Pmax/W)	490	495	500	505	510
Open Circuit Voltage (Voc/V)	39.57	39.82	40.07	40.32	40.57
Short Circuit Current (Isc/A)	15.78	15.84	15.90	15.96	16.01
Voltage at Maximum Power (Vmp/V)	32.93	33.13	33.33	33.53	33.73
Current at Maximum Power (Imp/A)	14.88	14.94	15.00	15.06	15.12
Module Efficiency (%)	22.03	22.26	22.48	22.71	22.93

\*STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, AM=1.5. Tolerance of Pmax is within ±3%.

## Electrical Parameters (NMOT\*\*)

Maximum Power (Pmax/W)	373	377	381	384	389
Open Circuit Voltage (Voc/V)	37.52	37.79	38.06	38.33	38.60
Short Circuit Current (Isc/A)	12.68	12.76	12.79	12.81	12.87
Voltage at Maximum Power (Vmp/V)	30.92	31.12	31.32	31.52	31.72
Current at Maximum Power (Imp/A)	12.06	12.11	12.16	12.18	12.26

\*\*NMOT: Under Nominal Module Operating Temperature (NMOT), irradiance of 800W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20°C, wind speed 1m/s.

## Electrical Parameters (At 10% Bifacial Power Output)

Output Power (Pmax/W)	539	545	550	556	561
Open Circuit Voltage (Voc/V)	39.57	39.82	40.07	40.32	40.57
Short Circuit Current (Isc/A)	17.31	17.37	17.44	17.50	17.56
Voltage at Maximum Power (Vmp/V)	32.93	33.13	33.33	33.53	33.73
Current at Maximum Power (Imp/A)	16.37	16.44	16.50	16.57	16.63

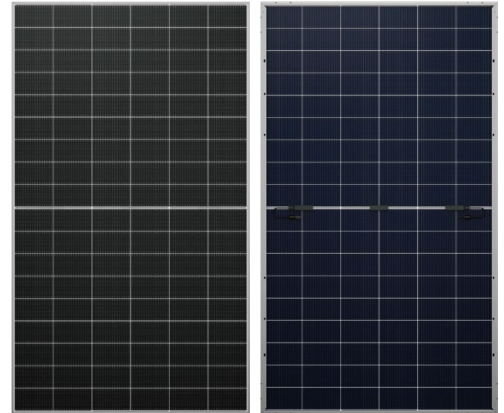
## Temperature Characteristics

NMOT	41±3°C
Temp. Coefficient of Voc	-0.25%/°C
Temp. Coefficient of Isc	+0.046%/°C
Temp. Coefficient of Pmax	-0.30%/°C

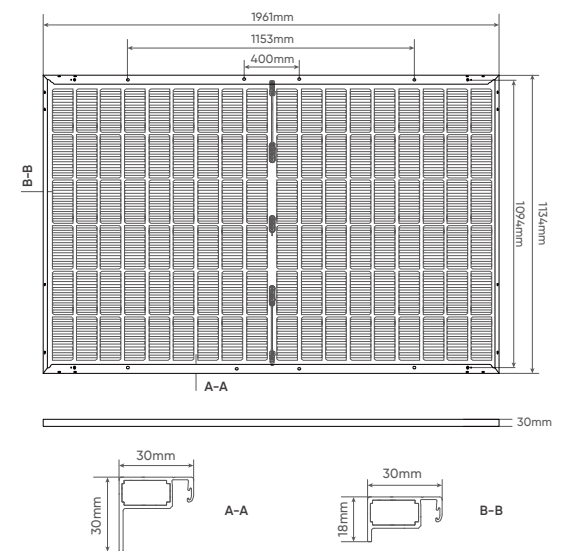
## Maximum Rating

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400Pa/5400Pa
Fuse Current	25A

## Product Image



## Drawings



## Characteristics (SE6R-54HBD-500W)

