

BiMAX 6R

435-455W

SP455M-48H

N-Type TOPCon Bifacial
Double-Glass Solar Module



22.52%

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.

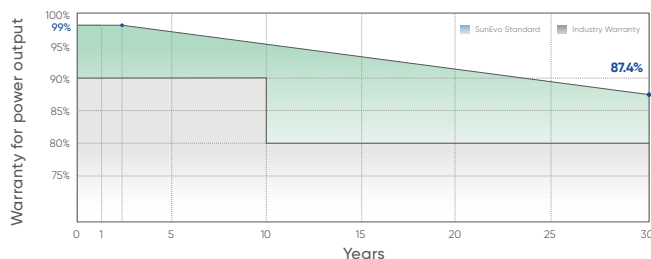
Quality Guarantee

25 Years

Materials Warranty

30 Years

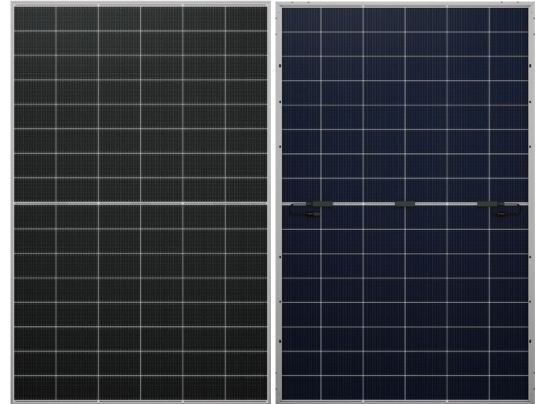
Power Warranty



Mechanical Characteristics

Weight	25kg
Dimensions	1762×1134×30mm
Cell Dimensions	182×210mm
Cell Amount	48×2 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 ² , 300mm in length, length can be customized / UV resistant
Connector	MC4 Compatible
Bifaciality	80±5%
Packing	36pcs/box, 936pcs/40'HQ

Product Image



Electrical Parameters (STC*)

Module Type: SP455M-48H	435	440	445	450	455
Maximum Power (Pmax/W)	435	440	445	450	455
Open Circuit Voltage (Voc/V)	35.13	35.38	35.63	35.88	36.13
Short Circuit Current (Isc/A)	15.77	15.84	15.90	15.97	16.02
Voltage at Maximum Power (Vmp/V)	29.18	29.38	29.58	29.78	29.98
Current at Maximum Power (Imp/A)	14.91	14.98	15.04	15.11	15.18
Module Efficiency (%)	21.77	22.02	22.27	22.52	22.52

*STC: Irradiance 1000W/m², cell temperature 25°C, AM=1.5. Tolerance of Pmax is within ±3%.

Electrical Parameters (NMOT**)

Maximum Power (Pmax/W)	331	335	339	343	347
Open Circuit Voltage (Voc/V)	33.30	33.56	33.82	34.08	34.34
Short Circuit Current (Isc/A)	12.66	12.74	12.79	12.85	12.88
Voltage at Maximum Power (Vmp/V)	27.48	27.67	27.86	28.05	28.24
Current at Maximum Power (Imp/A)	12.05	12.11	12.17	12.23	12.29

**NMOT: Under Nominal Module Operating Temperature (NMOT), irradiance of 800W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1m/s.

Electrical Parameters (At 10% Bifacial Power Output)

Output Power (Pmax/W)	479	484	490	495	501
Open Circuit Voltage (Voc/V)	35.13	35.38	35.63	35.88	36.13
Short Circuit Current (Isc/A)	17.31	17.38	17.45	17.53	17.59
Voltage at Maximum Power (Vmp/V)	29.18	29.38	29.58	29.78	29.98
Current at Maximum Power (Imp/A)	16.40	16.47	16.55	16.62	16.69

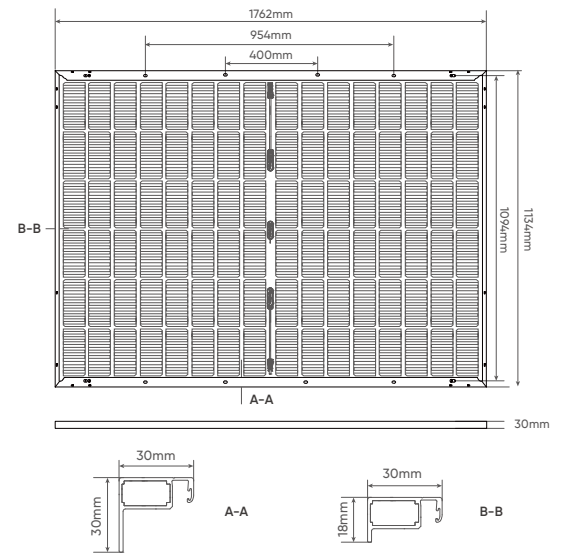
Temperature Characteristics

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

Drawings



Characteristics (SE6R-48HBD-450W)

