

BiMAX 6N

620-650W

SP650M-60H

Bifacial TOPCon Half Cell Double-glass Solar Module

TOPCon 2.0 Technology

Combining gettering process and single-side $\mu\text{-Si}$ technology to ensure higher cell efficiency and higher module power.

-0.30%/°C Pmax temperature coefficient

More stable power generation performance and even better in hot climate.

SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.

Up to 90% Bifaciality

Natural symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extend module lifespan.

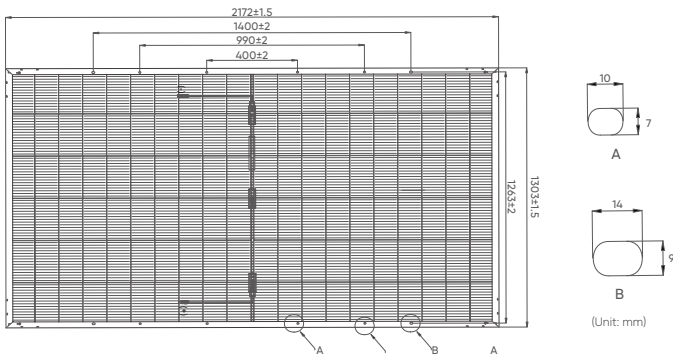
Quality Management System and Product Certification

- 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



Design(mm)



Solar Cells	TOPCon 210mm
No. of Cells	120 (6×20)
Dimensions	2172 × 1303 × 35mm
Weight	35.3kg
Glass Thickness	(F) 2.0mm anti-reflective solar glass (B) 2.0mm solar glass
Frame	Anodized aluminium alloy
Junction Box	IP68
Output Cables	4mm ² , 300mm in length, length can be customized / UV resistant
Connectors	MC4 original / MC4 compatible
Mechanical load test	5400Pa
Packaging	31pcs/box, 558pcs/40'HQ

Temperature Characteristics

NMOT (Nominal Module Operating Temperature)	44°C(±2°C)
Temperature Coefficient of Voc	-0.250%/°C
Temperature Coefficient of Isc	+0.046%/°C
Temperature Coefficient of Pmax	-0.300%/°C

Operating Characteristics

Operating Module Temperature	-40°C ~ +85°C
Maximum System Voltage	DC 1500 (IEC)
Maximum Series Fuse Rating	35A
Power Tolerance	0~+5W
Bifaciality	85%±5%

Electrical Parameters (STC*)

Module Type: SP650M-60H	620	625	630	635	640	645	650
Maximum Power (Pmax/W)	620	625	630	635	640	645	650
Module Efficiency (%)	21.90	22.10	22.30	22.40	22.60	22.78	22.95
Optimum Operating Voltage (Vmp/V)	35.70	35.90	36.10	36.30	36.50	36.70	36.90
Optimum Operating Current (Imp/A)	17.37	17.41	17.46	17.50	17.54	17.58	17.62
Open Circuit Voltage (Voc/V)	42.90	43.10	43.30	43.50	43.70	43.90	44.10
Short Circuit Current (Isc/A)	18.31	18.36	18.41	18.46	18.50	18.54	18.58

BSTC*

Maximum Power (Pmax/W)	469	473	476	480	484	488	492
Optimum Operating Voltage (Vmp/V)	33.80	33.90	34.10	34.30	34.50	34.70	34.90
Optimum Operating Current (Imp/A)	13.89	13.93	13.96	13.99	14.03	14.07	14.11
Open Circuit Voltage (Voc/V)	40.60	40.80	41.00	41.20	41.40	41.60	41.80
Short Circuit Current (Isc/A)	14.77	14.81	14.85	14.89	14.93	14.97	15.01

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

*BSTC: Front side irradiation 1000W/m², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25°C.

I-V Curve

