

OYUNGSOLAR

OSM78NTB

625-650 Watt

HALF CELL

N-Type TOPCon

BIFACIAL WITH DUAL GLASS

N-Type Technology

N-Type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 3.0 Technology

N-type modules with HOT 3.0 technology offer better reliability and efficiency.

Dual-Sided Power Generation

Dual-sided power generation gain increases with backside exposure to light, significantly reducing LCOE.

Mechanical Load Enhanced

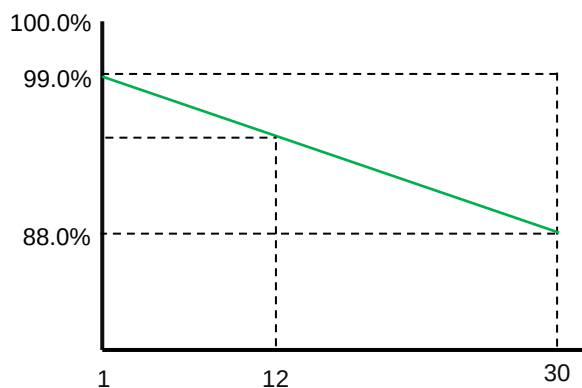
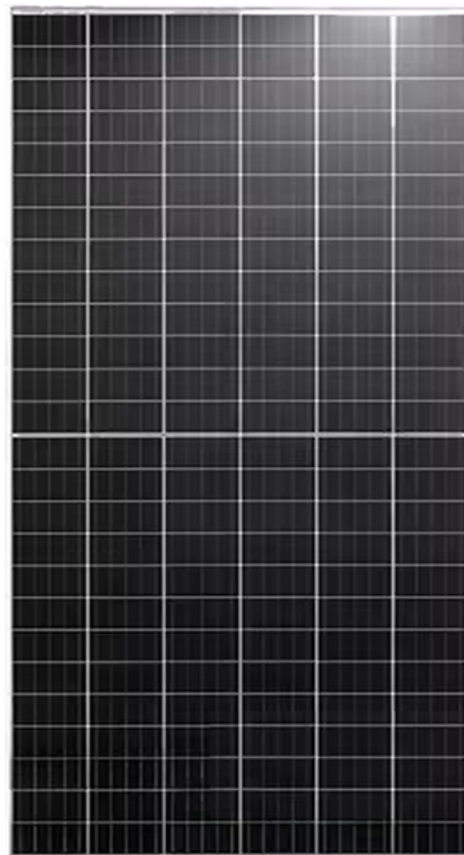
Certified to withstand: 5400 Pa front side max static test load 2400 Pa rear side max static test load

SMBB Technology

Better light trapping and current collection to improve module power output and reliability.

Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.



12 years Product Warranty	30 years Linear Power Warranty	1.0% First-year Degradation	0.40% Annual Degradation Over 30 Years
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IEC61215:2021 / IEC61730:2023
IEC61701 / IEC62716 / IEC60068 / IEC62804
ISO9001:2015: Quality Management System
ISO14001:2015: Environment Management System
ISO45001:2018: Occupational health and safety management systems



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Mechanical Parameters

Cell Type	N-type TOPCon
No. of cells	156 (78×2)
Dimension	2465×1134×30mm
Weight	34.0kg
Front Glass	2.0 mm, anti-reflection coating
Back Glass	2.0 mm, heat strengthened glass
Frame	anodized aluminium alloy
Junction Box	IP68 rated
Protection Class	Class II
IEC Fire Type	Class C
Output Cables	4.0mm ² , (+): 400mm, (-): 200mm, or customized length

Packaging Configuration

Pallet Dimentions	2525×1140×1251mm
Packaging Detail	36pcs/pallet, 576pcs/40'HC

Specifications (STC)

Maximum Power (Pmax/W)	625	630	635	640	645	650
Maximum Power Voltage (Vmp/V)	47.54	47.70	47.86	48.02	48.17	48.33
Maximum Power Current (Imp/A)	13.15	13.21	13.27	13.33	13.39	13.45
Open-circuit Voltage (Voc/V)	56.95	57.08	57.21	57.34	57.47	57.60
Short-circuit Current (Isc/A)	13.80	13.86	13.92	13.98	14.04	14.10
Module Efficiency (STC/%)	22.36	22.54	22.72	22.90	23.07	23.25
Power Tolerance	0~3%					
Temperature Coefficients of Pmax	-0.29%/°C					
Temperature Coefficients of Voc	-0.25%/°C					
Temperature Coefficients of Isc	0.045%/°C					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Specifications (BNPI)

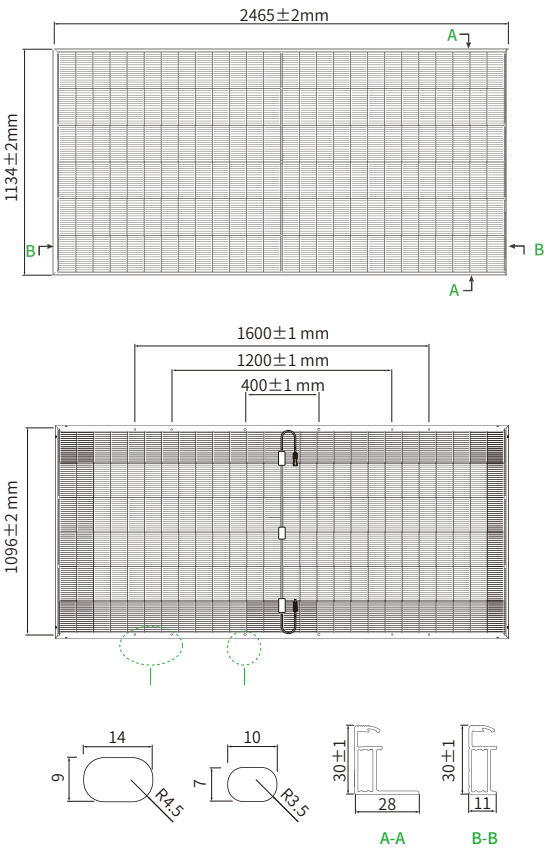
Maximum Power (Pmax/W)	688	693	699	704	710	716
Maximum Power Voltage (Vmp/V)	47.57	47.73	47.91	48.06	48.23	48.40
Maximum Power Current (Imp/A)	14.46	14.52	14.59	14.65	14.72	14.79
Open-circuit Voltage (Voc/V)	57.00	57.14	57.28	57.42	57.56	57.70
Short-circuit Current (Isc/A)	15.19	15.27	15.35	15.43	15.51	15.59

BNPI: Irradiance: front 1000W/m2, rear 135W/m2, Cell Temperature 25°C, AM=1.5

Application Conditions

Operating Temperature	-40°C ~ +70°C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature - NOCT	45±2°C
Bifaciality Coefficient	φVoc: 98±5%, φIsc: 80±5%, φPmax: 80±5%

Engineering Drawings



Electrical Performance

