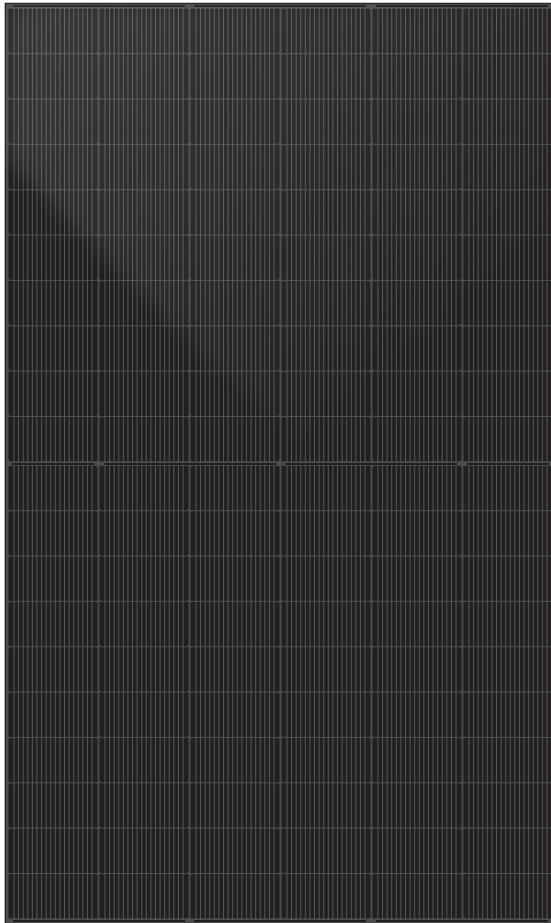




VenuSun Plus 1/2 Cut N-Topcon 500-525W

MS(500-525)MB-60HR-BB
Mono N-Type 182*95.8mm 120 Cells



- 
N-type Technology
 N-type solar technology gains slower power degradation and excellent low-light performance.
- 
Safer Operation
 Minimal heat loss, lower operating temperature, reduced hot spot risk, enhanced electrical safety.
- 
Extreme Environment
 High salt mist and ammonia resistance.
- 
Mechanical Load Enhanced
 5400Pa front side max static test load 2400Pa 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.

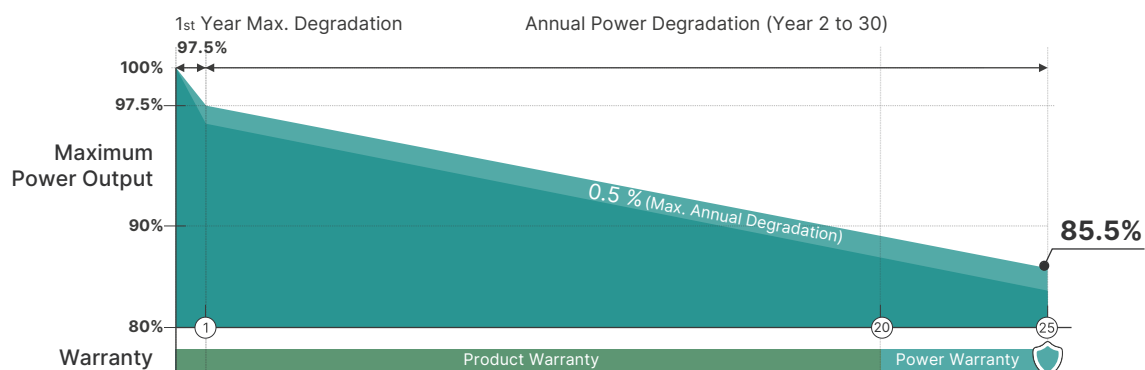


23.22%
Maximum Efficiency

0 ~ +5W
Positive Power Tolerance

20 Years
Product Warranty

25 Years
Power Warranty



Electrical Data(STC / NOCT)

Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Watts- P_{MAX} (Wp)*	500	376	505	380	510	384	515	387	520	391	525	395
Power Tolerance- P_{MAX} (W)	0 ~ +5											
Maximum Power Voltage- V_{MPP} (V)	37.10	35.20	37.30	35.40	37.50	35.60	37.70	35.80	37.90	36.00	38.10	36.20
Maximum Power Current- I_{MPP} (A)	13.48	10.67	13.54	10.72	13.60	10.77	13.66	10.81	13.72	10.86	13.78	10.91
Open Circuit Voltage- V_{OC} (V)	43.70	41.50	43.90	41.70	44.10	41.90	44.30	42.10	44.50	42.30	44.70	42.50
Short Circuit Current- I_{SC} (A)	14.48	11.69	14.54	11.74	14.60	11.79	14.66	11.84	14.72	11.88	14.78	11.93
Module Efficiency η_m (%)	22.11	22.11	22.33	22.33	22.55	22.55	22.78	22.78	23.00	23.00	23.22	23.22

* STC: Air Mass AM1.5, Irradiance at 1000W/m², Cell Temperature 25°C / Measuring tolerance: ±3%.
 * NOCT: Air Mass AM1.5, Irradiance at 800W/m², Cell Temperature 20°C / Measuring tolerance: ±3%.

Mechanical Data

Solar Cells	N-type Monocrystalline 182 x 95.8mm
Cell Orientation	120cells (20 x 6)
Module Dimensions	1994mm x 1134mm x 30mm
Weight	23.50kg
Front Glass	3.2mm
Encapsulant material	POE / EVA
Protection Class	Class II
Frame	Black anodized aluminum alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	Photovoltaic Technology Cable 4.0mm ² Portrait: N 1500mm / P 1500mm Length Can be Customized
Connector	MC4 compatible

* Please refer to regional datasheet for specific connector.

Temperature Ratings

NOCT(Nominal Operating Cell Temperature)	45°C (±2°C)
Temperature Coefficient of P_{MAX}	-0.30% / °C
Temperature Coefficient of V_{OC}	-0.25% / °C
Temperature Coefficient of I_{SC}	0.046% / °C

* Do not connect Fuse in Combiner Box with two or more strings in parallel connection.

Application Environment

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1500 VDC
Max Series Fuse Rating	25A
Mechanical Performance	P 5400Pa / N 2400Pa

Warranty

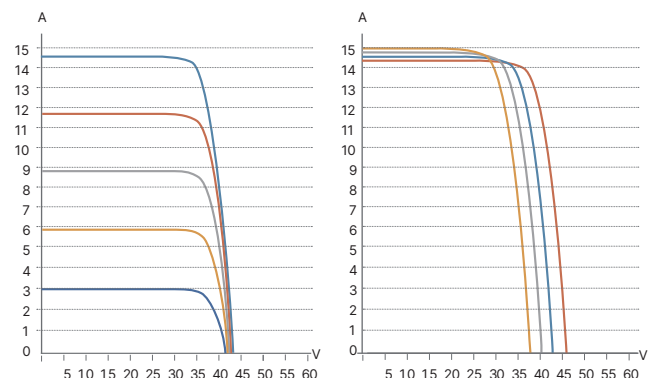
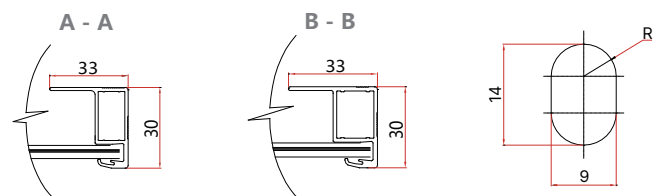
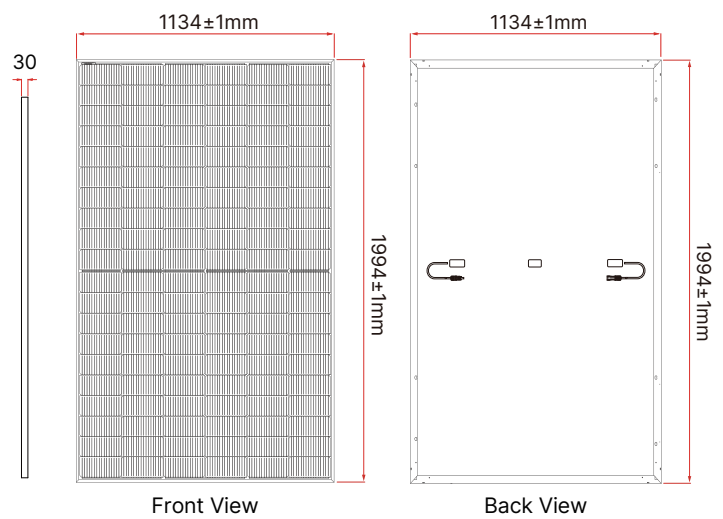
20 Years Product Warranty
25 Years Power Warranty
2.5% First Year Degradation
0.5% Annual Power Degradation

* Please refer to product warranty for details.

Packaging Configuration

Modules Per Pallet: 36 Pieces
Modules Per 40' Container: 792 Pieces (22 Pallets)

Dimensions of pv module (mm)



1000 W/m²
800 W/m²
600 W/m²
400 W/m²
200 W/m²

5°C
25°C
45°C
65°C