

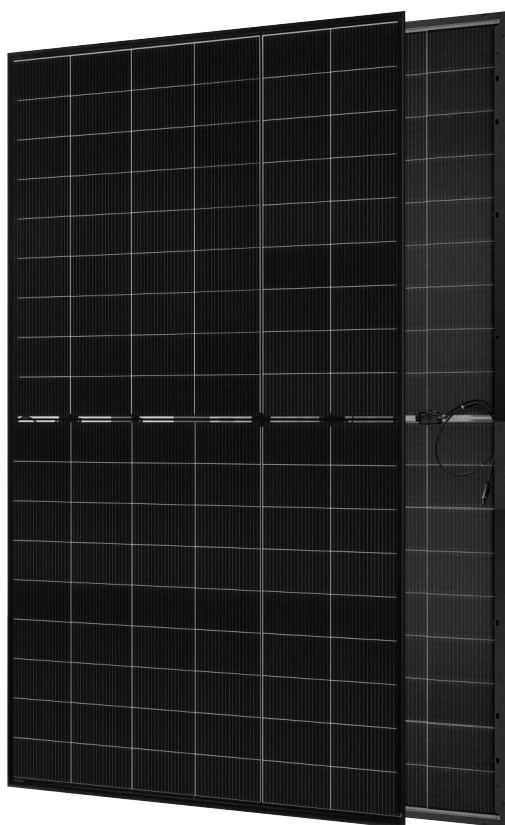
## HJT Technology

1/2 Cut

Full Black 500-520W

MS500-520DJT-54HRB  
Mono HJT 210mm 108 Cells

**Tecnologia solare  
più avanzata e unica**



### High Bifacial Rate

The HJT cell uses a symmetrical front and back structure, showing an ultra-high bifacial rate. The maximum power generation utilization rate on the back can reach 95%.



### No PID and LID Effects

HJT N-type silicon is doped with phosphorus, and the surface is TCO film, which abandons the insulating layer. Therefore, the HJT cell completely eliminates PID and LID effects.



### Low Temperature Coefficient

The power temperature coefficient of HJT PV modules is only  $-0.24\%/^{\circ}\text{C}$ . HJT modules operating in hot environments can bring more power generation gains.



### Consistent Color

Due to the characteristics of HJT cell process, HJT module color is basically the same without color difference. It creates a beautiful and coherent visual effect. HJT technology is the first choice for full-black modules.



### High Profitability

With cutting-edge technology and excellent performance, within the product life cycle, the return on investment of HJT modules is 18% higher than that of PERC modules and 12% higher than that of Topcon modules.



### High Flexibility

Because of the excellent cell flexibility of HJT modules, the risk of module cracks during transportation and installation is reduced. The reliability of the power station is improved.

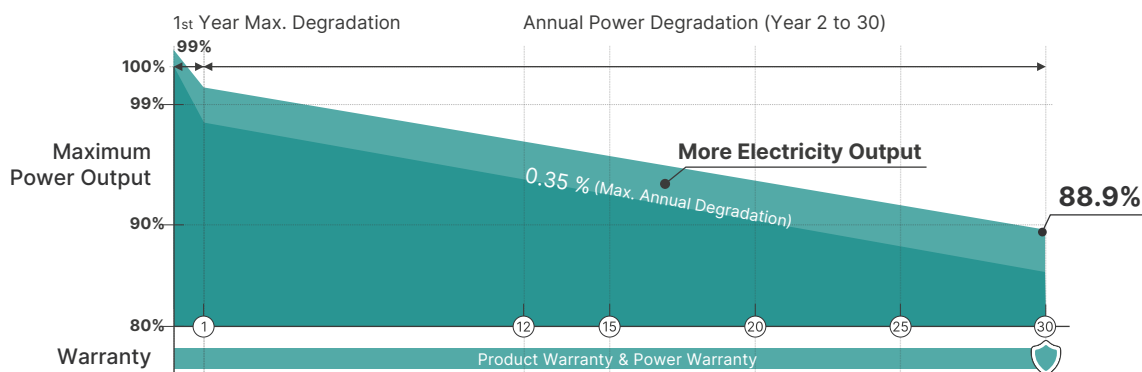


**23.40%**  
Maximum Efficiency

**0 ~ +5W**  
Positive Power Tolerance

**30 Years**  
Product Warranty

**30 Years**  
Power Warranty



## Electrical Data(STC / NOCT)

Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Watts- $P_{MAX}$ (Wp)*	500	381	505	385	510	389	515	393	520	397
Power Tolerance- $P_{MAX}$ (W)	0 ~ +5									
Maximum Power Voltage- $V_{MPP}$ (V)	34.16	32.63	34.27	32.73	34.38	32.83	34.49	32.93	34.60	33.03
Maximum Power Current- $I_{MPP}$ (A)	14.64	11.70	14.74	11.72	14.84	11.86	14.94	11.94	15.04	12.02
Open Circuit Voltage- $V_{OC}$ (V)	40.76	38.90	40.87	39.01	40.98	39.11	41.09	39.22	41.20	39.32
Short Circuit Current- $I_{SC}$ (A)	15.48	12.37	15.59	12.46	15.70	12.55	15.81	12.64	15.92	12.72
Module Efficiency $\eta_m$ (%)	22.50	22.50	22.70	22.70	22.90	22.90	23.20	23.20	23.40	23.40

\* STC: Air Mass AM1.5, Irradiance at 1000W/m<sup>2</sup>, Cell Temperature 25°C / Measuring tolerance:  $\pm 3\%$ .  
 \* NOCT: Irradiance at 800W/m<sup>2</sup>, Cell Temperature 20°C, Wind Speed 1m/s / Measuring tolerance:  $\pm 3\%$ .

## BNPI

Peak Power Watts- $P_{MAX}$ (Wp)*	560	566	571	577	583
Maximum Power Voltage- $V_{MPP}$ (V)	34.28	34.39	34.50	34.61	34.72
Maximum Power Current- $I_{MPP}$ (A)	16.36	16.47	16.58	16.69	16.80
Open Circuit Voltage- $V_{OC}$ (V)	40.90	41.01	41.12	41.23	41.34
Short Circuit Current- $I_{SC}$ (A)	17.36	17.48	17.61	17.73	17.85

BNPI: AM1,5 , 1000W/m<sup>2</sup> , 1000W/m<sup>2</sup> , 25°C.

## Mechanical Data

Solar Cells	Monocrystalline, HJT
Cell Orientation	108cells (6 x 18)
Module Dimensions	1960mm x 1134mm x 30mm
Weight	28.50kg
Front Glass	2,0 mm, vetro AR ad alta trasmissione rinforzato termicamente
Encapsulant material	POE
Back Glass	2,0 mm, vetro rinforzato termicamente ad alta trasmissione
Frame	30 mm, lega di alluminio anodizzato nera
J-Box	IP 68 Rated(3 Bypass Diodes)
Cables	Photovoltaic Technology Cable 4.0mm <sup>2</sup> Portrait: N 1200mm / P 1200mm Length Can be Customized
Connector	Compatibile MC4

\* Please refer to regional datasheet for specific connector.

## Temperature Ratings

NOCT(Nominal Operating Cell Temperature)	44°C ( $\pm 3^\circ\text{C}$ )
Temperature Coefficient of $P_{MAX}$	-0.24% / °C
Temperature Coefficient of $V_{OC}$	-0.22% / °C
Temperature Coefficient of $I_{SC}$	0.04% / °C

\* Do not connect fuse in combiner box with two or more strings in parallel connection.

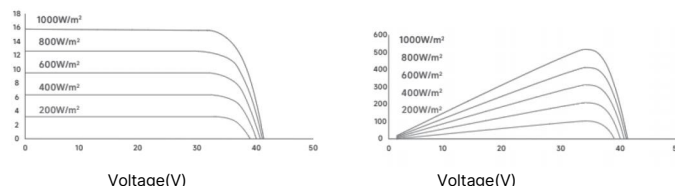
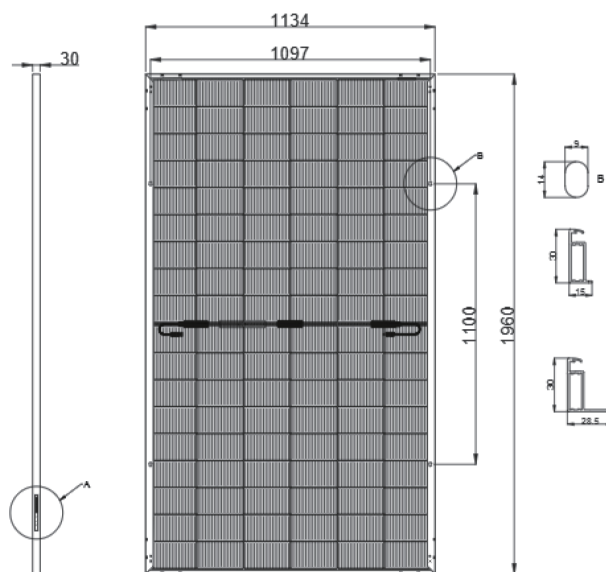
## Application Environment

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	(IEC)30A
Mechanical Performance	P 5400Pa / N 2400Pa

## Packaging Configuration

Modules Per Pallet: 36 Pieces
Modules Per 40' Container: 864 Pieces

## Dimensions of PV Module (mm)



## Warranty

30 Years Product Warranty
30 Years Power Warranty
1% First Year Degradation
0.35% Annual Power Degradation

\* Please refer to product warranty for details.