

**520W**  
Maximum Power Output

**21.7%**  
Maximum Module Efficiency

**0~+5W**  
Power Output Guarantee

## TCM-M500 SERIES

150 Cells Monocrystalline Module  
500W - 520W

Cell Type



10BB(210mm)



Ideal Choice for large scale ground installation.



Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail trails free.



Special cutting and soldering technology leads to low hotspot risk.



Sand blowing test, salt mist test and ammonia test passed to endure harsh environments.



Optimized system performance due to module level current sorting.

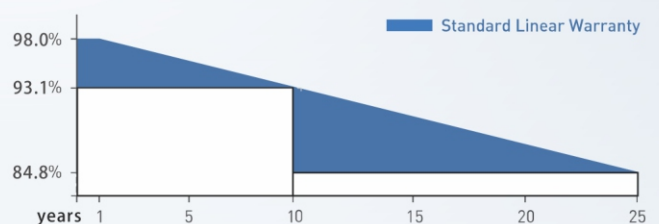


Highly transparent self cleaning glass brings additional yield and easy maintenance.

### Delivers Reliable Performance Over Time

- Manufacturer of crystalline silicon photovoltaic module
- Fully automatic facility and world class technology
- Rigorous quality control to meet the highest standard : ISO9001:2015, ISO14001:2015 and OHSAS : 18001:2007
- Tested for harsh environment ( Salt Mist, Ammonia Corrosion and Sand Blowing Test : IEC 61701, IEC 62716, DIN EN 60068-2-68)
- Long term reliability tests
- 2X100% EL inspection ensuring defect free modules

### Linear Performance Warranty



10 Years Product Warranty 25 Years Linear Power Warranty

\* Please refer to standard warranty for details

Product certification



### Electrical Specification (STC\*)

Type	TCM-M500SP	TCM-M505SP	TCM-M510SP	TCM-M515SP	TCM-M520SP
Maximum Power Pmax(W)	500	505	510	515	520
Maximum Power Voltage Vmp(V)	42.8	43.0	43.2	43.4	43.6
Maximum Power Current Imp(A)	11.69	11.75	11.81	11.87	11.94
Open Circuit Voltage Voc(V)	51.7	51.9	52.1	52.3	52.5
Short Circuit Current Isc(A)	12.28	12.35	12.42	12.49	12.55
Module Efficiency (%)	20.9	21.1	21.3	21.5	21.7
Power Output Tolerance (W)	0 ~ +5				

\* Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, Air Mass 1.5

### Electrical Specification (NOCT\*)

Type	TCM-M500SP	TCM-M505SP	TCM-M510SP	TCM-M515SP	TCM-M520SP
Maximum Power Pmax(W)	379	382	386	390	394
Maximum Power Voltage Vmp(V)	40.4	40.6	40.8	41.0	41.2
Maximum Power Current Imp(A)	9.37	9.43	9.49	9.55	9.61
Open Circuit Voltage Voc(V)	48.8	49.0	49.2	49.4	49.6
Short Circuit Current Isc(A)	9.89	9.94	9.99	10.04	10.09

\* Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

### Mechanical Data

Number of Cells	150 Cells (5X30)
Dimension of Module L*W*H (mm)	2176 x 1096 x 35 mm
Weight (Kg)	26.3 Kg
Glass	High Transparency solar glass 3.2 mm
Backsheet	White
Frame	Silver, Anodized aluminium alloy
J-Box	IP68 Rated
Cable	4.0 mm <sup>2</sup> , 300 mm <sup>2</sup>
Number of Diodes	3
Wind/ Snow Load	2400 Pa / 5400 Pa
Connector	MC Compatible

For more detail please check the installation manual

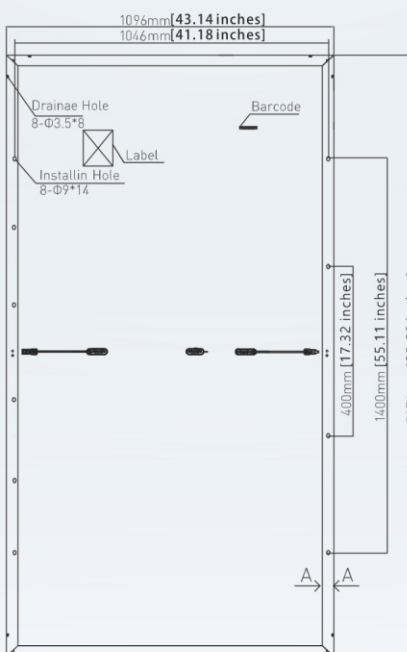
### Temperature Ratings

Nominal Operating Cell Temperature (NOCT)	43±2°C
Temperature Coefficient of Isc	+0.040%/°C
Temperature Coefficient of Voc	-0.250%/°C
Temperature Coefficient of Pmax	-0.340%/°C

### Maximum Ratings

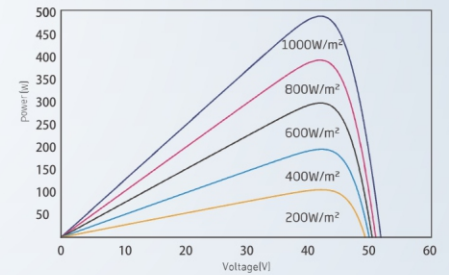
Operating Temperature	-40 ~ ±85°C
Maximum System Voltage	1500V DC - (H)
Max Series Fuse Rating	25 A

### Module Dimension



Back View

P-V Curve at Different Irradiation (490W)



I-V Curve at Different Temperature (490W)

