

# ZXM8-SP150 Series

Znshinesolar 10BB HALF-CELL  
Monocrystalline PERC PV Module



485W | 490W | 495W | 500W | 505W



## Excellent cells efficiency

MBB technology decreases the distance between bus bars and finger grid line which is benefit to power increase.



## Better Weak Illumination Response

More power output in weak light condition, such as haze, cloudy, and morning



## Anti PID

Limited power degradation caused by PID effect is guaranteed under strict testing condition for mass production



## High wind and snow resistance

■ 5400 Pa snow load      ■ 2400 Pa wind load



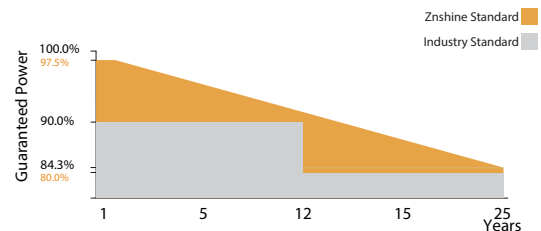
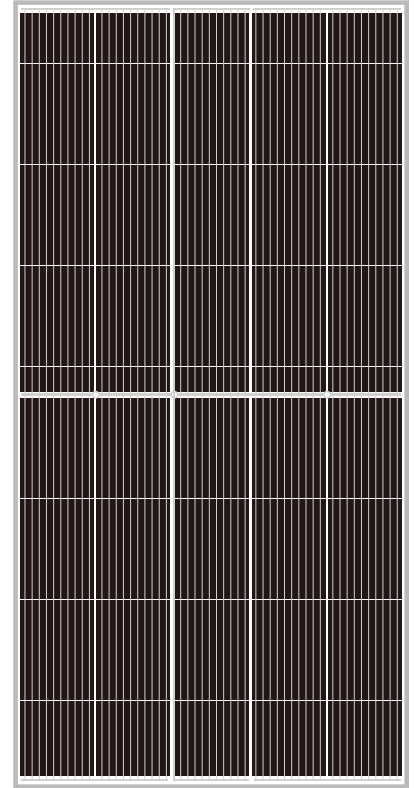
## 25 years power warranty

After 25 years our solar panel keeps at least 80% of its initial power output



## Higher lifetime Power Yield

2.5% first year degradation, 0.55% linear degradation



12 years product warranty  
25 years output warranty



0.55% Annual Degradation  
over 25 years



Founded in 1988, ZNShine solar is a world's leading high-tech PV module manufacturer. With the state-of-the-art production lines, the company boasts module capacity of 6GW. Bloomberg has listed ZNShine as a global Tier 1 PV module maker. Today Znshine has distributed its sales to more than 60 countries around the globe.

**ELECTRICAL CHARACTERISTICS | STC\***

|                                |       |       |       |       |       |
|--------------------------------|-------|-------|-------|-------|-------|
| Nominal Power Watt Pmax(W)*    | 485   | 490   | 495   | 500   | 505   |
| Power Output Tolerance Pmax(%) | 0~+3  | 0~+3  | 0~+3  | 0~+3  | 0~+3  |
| Maximum Power Voltage Vmp(V)   | 42.20 | 42.40 | 42.60 | 42.80 | 43.00 |
| Maximum Power Current Imp(A)   | 11.50 | 11.57 | 11.63 | 11.69 | 11.75 |
| Open Circuit Voltage Voc(V)    | 51.00 | 51.20 | 51.40 | 51.60 | 51.80 |
| Short Circuit Current Isc(A)   | 11.99 | 12.05 | 12.11 | 12.17 | 12.23 |
| Module Efficiency (%)          | 20.34 | 20.56 | 20.76 | 20.97 | 21.17 |

\*STC (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, AM 1.5  
\*Measuring tolerance: ±3%

**ELECTRICAL CHARACTERISTICS | NMOT\***

|                               |        |        |        |        |        |
|-------------------------------|--------|--------|--------|--------|--------|
| Maximum Power Pmax(Wp)        | 364.20 | 368.10 | 371.70 | 375.30 | 379.00 |
| Maximum Power Voltage Vmpp(V) | 39.90  | 40.10  | 40.30  | 40.50  | 40.70  |
| Maximum Power Current Impp(A) | 9.13   | 9.18   | 9.22   | 9.27   | 9.32   |
| Open Circuit Voltage Voc(V)   | 47.80  | 48.00  | 48.20  | 48.30  | 48.50  |
| Short Circuit Current Isc(A)  | 9.68   | 9.73   | 9.77   | 9.82   | 9.87   |

\*NMOT(Nominal module operating temperature):Irradiance 800W/m<sup>2</sup>,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s

**MECHANICAL DATA**

|                   |  |
|-------------------|--|
| Solar cells       | Mono PERC  |
| Cells orientation | 150 (5×30)   |
| Module dimension  | 2176×1096×35 mm(With Frame)                        |
| Weight            | 26.5 kg  |
| Glass             | 3.2mm, High Transmission, AR Coated Tempered Glass |
| Junction box      | IP 68, 3 diodes                                    |
| Cables            | 4 mm <sup>2</sup> ,350 mm                          |
| Connectors        | MC4-compatible                                     |

**TEMPERATURE RATINGS**

**WORKING CONDITIONS**

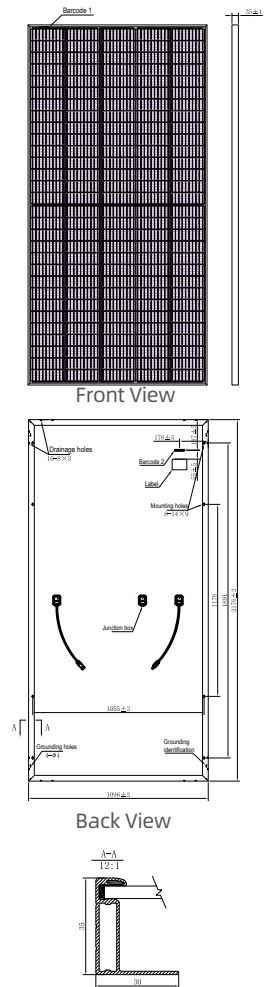
|                                 |           |                         |                   |
|---------------------------------|-----------|-------------------------|-------------------|
| NMOT                            | 43°C ±2°C | Maximum system voltage  | 1500 V DC         |
| Temperature coefficient of Pmax | -0.35%/°C | Operating temperature   | -40°C~+85°C       |
| Temperature coefficient of Voc  | -0.29%/°C | Maximum series fuse     | 20 A              |
| Temperature coefficient of Isc  | 0.05%/°C  | Maximum load(snow/wind) | 5400 Pa / 2400 Pa |

\*Do not connect Fuse in Combiner Box with two or more strings in parallel connection  
\*Remark:Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types.

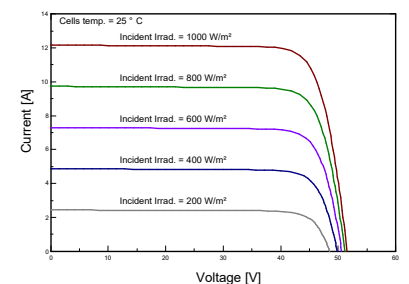
**PACKAGING CONFIGURATION**

|  |     |
|--|-----|
| Piece/Box  | 30  |
| Piece/Container <sub>(40'HQ)</sub>                         | 650 |
| Piece/Container <sub>(with additional small package)</sub> | 700 |

**DIMENSIONS(MM)**



**I-V CURVES OF PV MODULE(500W)**



**P-V CURVES OF PV MODULE(500W)**

