

# ZXM7-SP144 Series

Znshinesolar 10BB HALF-CELL  
Monocrystalline PERC PV Module



520W | 525W | 530W | 535W | 540W



## 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



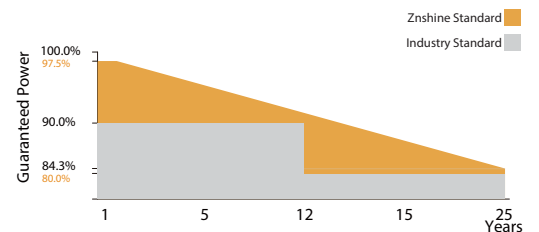
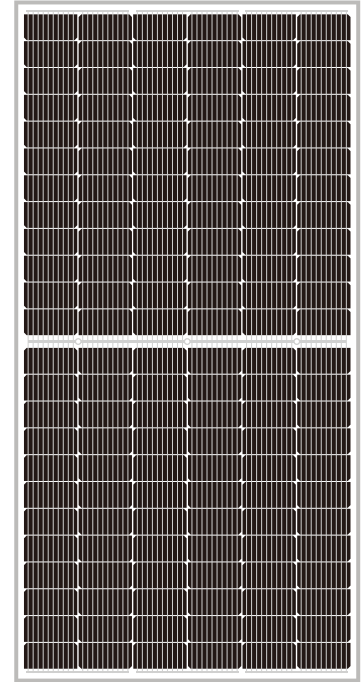
## 25 years power warranty

After 25years 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)*	520	525	530	535	540
Power Output Tolerance Pmax(%)	0~+3	0~+3	0~+3	0~+3	0~+3
Maximum Power Voltage Vmp(V)	40.60	40.80	41.00	41.20	41.40
Maximum Power Current Imp(A)	12.82	12.88	12.94	13.00	13.05
Open Circuit Voltage Voc(V)	48.90	49.10	49.30	49.50	49.70
Short Circuit Current Isc(A)	13.54	13.60	13.66	13.72	13.78
Module Efficiency (%)	20.34	20.54	20.74	20.93	21.13

\*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)	388.90	392.60	396.30	400.00	403.50
Maximum Power Voltage Vmpp(V)	37.80	38.00	38.20	38.30	38.50
Maximum Power Current Imp(A)	10.29	10.34	10.39	10.43	10.48
Open Circuit Voltage Voc(V)	45.70	45.90	46.10	46.20	46.40
Short Circuit Current Isc(A)	10.93	10.98	11.03	11.08	11.13

\*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	144 (6×24)
Module dimension	2256×1133×40 mm(With Frame)
Weight	28.5 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**

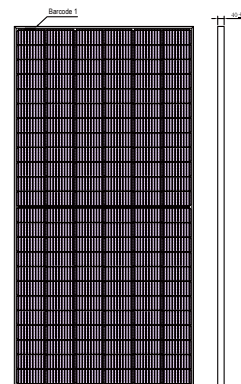
NMOT	44°C ±2°C	Maximum system voltage	1500 V DC
Temperature coefficient of Pmax	-0.35%/°C	Operating temperature	-40°C~+85°C
Temperature coefficient of Voc	-0.29%/°C	Maximum series fuse	25 A
Temperature coefficient of Isc	0.05%/°C	Maximum load(snow/wind)	5400 Pa / 2400 Pa

\*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.

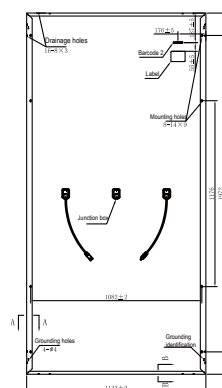
**PACKAGING CONFIGURATION**

Piece/Box	27
Piece/Container <sub>(40'HQ)</sub>	540
Piece/Container <sub>(with additional small package)</sub>	/

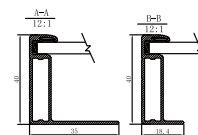
**DIMENSIONS(MM)**



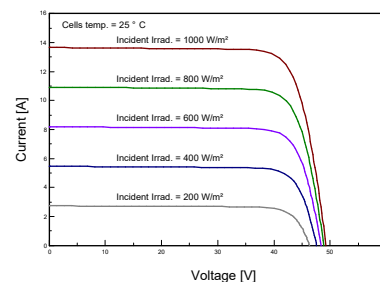
Front View



Back View



**I-V CURVES OF PV MODULE(530W)**



**P-V CURVES OF PV MODULE(530W)**

