ZXM7-SHLDD144 Series __ ZNSHINESOLAR



Znshinesolar 10BB HALF-CELL Bifacial Light-Weight Double Glass Monocrystalline PERC PV Module

525W | 530W | 535W | 540W | 545W | 550W



Excellent cells efficiency

MBB technology decreases the distance between busbar 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 early morning.



Anti PID

Ensured PID resistance through the quality control of cell manufacturing process and raw materials.



Adapt To Harsh Outdoor Environment

Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity environment.



TIER 1

Global, Tier 1 bankable brand, with independently certified state-of-the-art automated manufacturing.



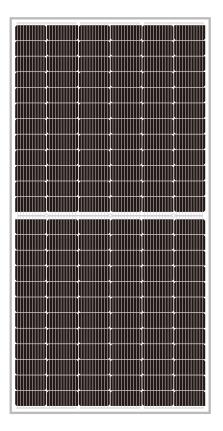
Excellent Quality Managerment System

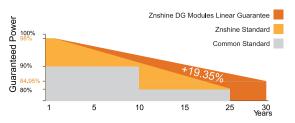
Warranted reliability and stringent quality assurances well beyond certified requirements.



Bifacial Technology

Up to 25% additional power gain from back side depending on albedo.







12 years product guarantee 30 years output guarantee



0.45% annual degradation after the first year











IEC61215/IEC61730/IEC61701/IEC62716/UL61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

ISO45001: Occupational Health and Safety Management System



ELECTRICAL CHARACTERISTICS | STC* Nominal Power Watt Pmax(W)* 530 535 540 545 550 Power Output Tolerance Pmax(%) 0~+3 0~+3 0~+3 0~+3 0~+3 0~+3 Maximum Power Voltage Vmp(V) 41.90 40.90 41.10 41.30 41.50 41.70 Maximum Power Current Imp(A) 12.85 12.91 12.96 13.02 13.07 13.13 Open Circuit Voltage Voc(V) 49.80 50.00 50.20 49.20 49.40 49.60 Short Circuit Current Isc(A) 13.89 13.65 13.71 13.77 13.83 13.59 Module Efficiency (%) 20.31 20.51 20.70 20.89 21.09 21.28 *STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25°C, AM 1.5 *Measuring tolerance: ±3%

| ELECTRICAL CHARACTERISTICS NMOT* | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--|--|
| Maximum Power Pmax(Wp) | 392.70 | 396.40 | 399.90 | 403.60 | 406.80 | 410.80 | | |
| Maximum Power Voltage Vmpp(V) | 38.00 | 38.20 | 38.40 | 38.50 | 38.80 | 38.90 | | |
| Maximum Power Current Impp(A) | 10.33 | 10.38 | 10.42 | 10.47 | 10.49 | 10.56 | | |
| Open Circuit Voltage Voc(V) | 46.00 | 46.20 | 46.30 | 46.50 | 46.70 | 46.90 | | |
| Short Circuit Current Isc(A) | 10.98 | 11.02 | 11.07 | 11.12 | 11.17 | 11.22 | | |
| *NMOT(Nominal module operating temperature):Irradiance 800W/m²,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s | | | | | | | | |

ELECTRICAL CHARACTERISTICS WITH 25% REAR SIDE POWER GAIN Front power Pmax/W 525 530 535 540 545 550 669 675 681 688 Total power Pmax/W 656 663 Vmp/V(Total) 41.00 41.20 41.40 41.60 41.80 42.00 Imp/A(Total) 16.01 16.08 16.30 16.15 16.23 16.37 Voc/V(Total) 49.30 49.50 49.70 49.90 50.10 50.30 Isc/A(Total) 16.95 17.02 17.10 17.17 17.25 17.32

MECHANICAL DATA

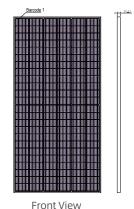
| Solar cells Mono PERC | Mono PERC | | | | |
|---|-----------------------------|--|--|--|--|
| Cells orientation 144 (6×24) | | | | | |
| Module dimension 2279×1134×30 mm(With Frame) | 2279×1134×30 mm(With Frame) | | | | |
| Weight 33.5 kg | 33.5 kg | | | | |
| Glass 2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Gl | ass | | | | |
| Junction box IP 68, 3 diodes | | | | | |
| Cables 4 mm²,350 mm | | | | | |
| Connectors MC4-compatible | | | | | |

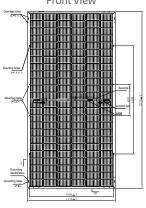
| TEMPERATURE RATING | S | WORKING CONDITIONS | | |
|---------------------------------|-----------|-------------------------|-------------------|--|
| NMOT | 44°C ±2°C | Maximum system voltage | 1500 V DC | |
| Temperature coefficient of Pmax | -0.35%/℃ | Operating temperature | -40°C~+85°C | |
| Temperature coefficient of Voc | -0.29%/℃ | Maximum series fuse | 30 A | |
| Temperature coefficient of Isc | 0.05%/℃ | Maximum load(snow/wind) | 5400 Pa / 2400 Pa | |
| Refer.Bifacial Factor | 70±5% | | | |

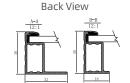
Do not connect Fuse in Combiner Box with two or more strings in parallel connection

PACKAGING CONFIGURATION

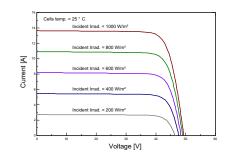
DIMENSIONS(MM)



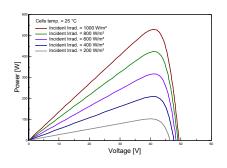




I-V CURVES OF PV MODULE(530W)



P-V CURVES OF PV MODULE(530W)



^{*}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