



ZXM7-SHLDD108 Series

10BB HALF-CELL Bifacial Double Glass Monocrystalline **PERC PV Module**



*As there are different certification requirements in different markets.please contact your local znshine sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

Key Features

5



Charanteed Power 84.95 80% 80%

100%

Excellent Cells Efficiency

10

*Please check the valid version of Limited Product Warranty which is officially released by ZNSHINE PV-TECH Co.,Ltd.

15

25

30 Years

MBB technology reduce the distance between busbars and finger grid line which is benefit to power increase.



Anti PID

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



TIER 1

Global, Tier 1 bankable brand, with independently certified advanced automated manufacturing.



Bifacial Technology

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



Better Weak Illumination Response

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



Adapt To Harsh Outdoor Environment

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

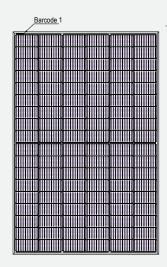


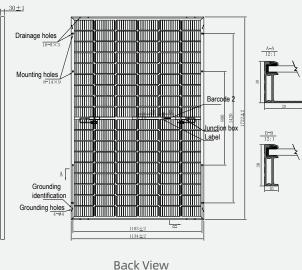
Excellent Quality Managerment System

Warranted reliability and stringent quality assurances well beyond certified requirements.



DIMENSIONS OF PV MODULE(mm)





Front View

*Remark: customized frame color and cable length available upon request

ELECTRICAL CHARACTERISTICS | STC*

| Nominal Power Watt Pmax(W)* | 395 | 400 | 405 | 410 | 415 |
|------------------------------|-------|-------|-------|-------|-------|
| Maximum Power Voltage Vmp(V) | 30.70 | 30.90 | 31.10 | 31.30 | 31.50 |
| Maximum Power Current Imp(A) | 12.87 | 12.95 | 13.03 | 13.10 | 13.18 |
| Open Circuit Voltage Voc(V) | 36.90 | 37.10 | 37.30 | 37.50 | 37.70 |
| Short Circuit Current Isc(A) | 13.62 | 13.70 | 13.78 | 13.86 | 13.94 |
| Module Efficiency (%) | 20.23 | 20.48 | 20.74 | 21.00 | 21.25 |

*The data above is for reference only and the actual data is in accordance with the pratical testing

*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25±2°C, AM 1.5 *Measuring uncertainity: ±3%, all the electrical characteristics such as Power, Im, Vm and FF are within ±3% tolerance.

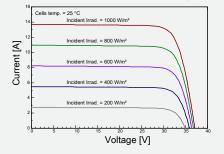
ELECTRICAL CHARACTERISTICS | NMOT*

| Maximum Power Pmax(Wp) | 295.20 | 299.00 | 302.70 | 306.30 | 310.10 |
|-------------------------------|--------|--------|--------|--------|--------|
| Maximum Power Voltage Vmpp(V) | 28.50 | 28.70 | 28.90 | 29.10 | 29.30 |
| Maximum Power Current Impp(A) | 10.34 | 10.41 | 10.47 | 10.54 | 10.60 |
| Open Circuit Voltage Voc(V) | 34.50 | 34.70 | 34.80 | 35.00 | 35.20 |
| Short Circuit Current Isc(A) | 11.00 | 11.06 | 11.13 | 11.19 | 11.26 |

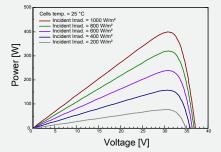
40T:Irradiance 800W/m²,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s **ELECTRICAL CHARACTERISTICS WITH 25% REAR SIDE POWER GAIN***

| Front power Pmax/W | 395 | 400 | 405 | 410 | 415 |
|--|------------------------|---------------------|--------------------|--------|-------|
| Total power Pmax/W | 494 | 500 | 506 | 513 | 519 |
| Vmp/V(Total) | 30.80 | 31.00 | 31.20 | 31.40 | 31.60 |
| Imp/A(Total) | 16.03 | 16.13 | 16.23 | 16.32 | 16.42 |
| Voc/V(Total) | 37.00 | 37.20 | 37.40 | 37.60 | 37.80 |
| Isc/A(Total) | 16.97 | 17.06 | 17.16 | 17.27 | 17.36 |
| *Bifacial Caip: The additional gain from the back side compare | ad to the new or of th | o front cido at the | stand and tost con | dition | |

I-V CURVES OF PV MODULE(400W)



P-V CURVES OF PV MODULE(400W)



MECHANICAL DATA

| Solar cells | Mono PERC |
|-------------------|--|
| Cells orientation | 108 (6×18) |
| Module dimension | 1722×1134×30 mm (With Frame) |
| Weight | 24.5±1.0 kg |
| Glass | 2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass |
| Junction box | IP 68, 3 diodes |
| Cables | 4 mm² ,350 mm (With Connectors) |
| Connectors* | MC4-compatible |
| | |

*Please refer to regional datasheet for specified connector

| 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 | 30 A |
| Temperature coefficient of Isc | 0.05%/°C | Front Side Maximum Static Loading | Up to 5400Pa |
| Refer.Bifacial Factor | 70±10% | Rear Side Maximum Static Loading | Up to 2400Pa |
| *Remark:Do not connect Fuse in Combiner Box with t | wo or more strings ir | n parallel connection | |

PACKAGING CONFIGURATION*

| Piece/Box | 36 |
|------------------------|-----|
| Piece/Container(40'HQ) | 936 |

*Customized packaging is available upon request. *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.

*Caution:Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

Istracial Gain: The additional gain from the back side compared to the power of the f It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

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Note: Specifications included in this datasheet are subject to change without notice.ZNSHINE reserves the right of final interpretation © ZNSHINE SOLAR 2022 | Version: ZXM7-SHLDD108 2208.E No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document