



# ZXM7-UHLD144 Series

Znshinesolar 16BB HALF-CELL N-Type TOPCon Double Glass Monocrystalline 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.

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

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# **KEY FEATURES**

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Bower Bower

100%

#### **Excellent Cells Efficiency**

SMBB 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.



## **Graphene Coating**

Graphene coating modules can increase power generation and self-cleaning, also can save maintainance cost



#### **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.

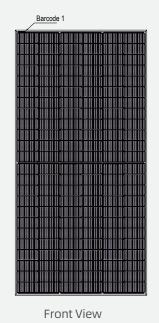


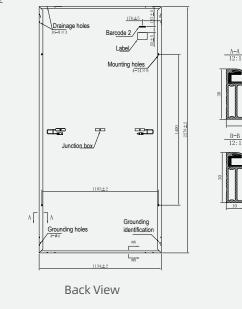
## Excellent Quality Managerment System

Warranted reliability and stringent quality assurances well beyond certified requirements.

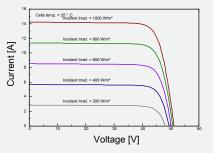


#### **DIMENSIONS OF PV MODULE(mm)**

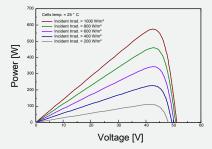




#### I-V CURVES OF PV MODULE(575W)



#### P-V CURVES OF PV MODULE(575W)



1500 V DC

-40°C~+85°C

Up to 5400 Pa Up to 2400 Pa

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

#### **ELECTRICAL CHARACTERISTICS** | STC\*

#### **MECHANICAL DATA**

| Nominal Power Watt Pmax(W)*  | 555   | 560   | 565   | 570   | 575   | 580   | 585    | Solar cells                     | N-type Monocrystalline   |
|--|-------|-------|-------|-------|-------|-------|--------|---------------------------------|--|
| Maximum Power Voltage Vmp(V)   | 41.80 | 42.00 | 42.20 | 42.40 | 42.60 | 42.80 | 43.00  | Cells orientation               | 144 (6×24)   |
| Maximum Power Current Imp(A)   | 13.28 | 13.34 | 13.39 | 13.45 | 13.50 | 13.56 | 13.61  | Module dimension                | 2278×1134×30 mm (With Frame)                                       |
| Open Circuit Voltage Voc(V)  | 50.40 | 50.60 | 50.80 | 51.00 | 51.20 | 51.40 | 51.60  | Weight                          | 31.5±1.0 kg  |
| Short Circuit Current Isc(A)   | 14.00 | 14.06 | 14.12 | 14.18 | 14.24 | 14.30 | 14.36  | Glass                           | 2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass |
| Module Efficiency (%)  | 21.5  | 21.7  | 21.9  | 22.1  | 22.3  | 22.5  | 22.6   | Junction box                    | IP 68, 3 diodes  |
| *The data above is for reference only and the actual data is in accordance with the pratical testing<br>*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25±2°C, AM 1.5 |       |       |       |       |       | ing   | Cables | 4 mm² ,350 mm (With Connectors) |  |

Connectors\*

MC4-compatible

\*Measuring uncertainity: ±3%, all the electrical characteristics such as Power, Im, Vm and FF are within ±3% tolerance.

|   | CS   N | мот    |        |        |        |        | *Please refer to regional datasheet for specified connector<br>TEMPERATURE RATINGS |  | WORKING CONDITIONS          |   |         |
|---|--------|--------|--------|--------|--------|--------|--|--|-----------------------------|---|---------|
| Maximum Power Pmax(Wp)  | 418.90 | 422.80 | 426.30 | 430.20 | 433.80 | 437.70 | 441.40   | ММОТ   | 44℃ ±2℃                     | Maximum system voltage                            | 1500 V  |
| Maximum Power Voltage Vmp(V)  | 39.40  | 39.60  | 39.70  | 39.90  | 40.10  | 40.30  | 40.40  | Temperature coefficient of Pmax  | (-0.30±0.03)%/°C            | Operating temperature                             | -40°C~  |
| Maximum Power Current Imp(A)  | 10.64  | 10.68  | 10.73  | 10.77  | 10.82  | 10.87  | 10.92  | Temperature coefficient of Voc   | -0.25%/°C                   | Maximum series fuse                               | 25 A    |
| Open Circuit Voltage Voc(V)   | 47.60  | 47.70  | 47.90  | 48.10  | 48.30  | 48.50  | 48.70  | Temperature coefficient of Isc   | 0.046%/°C                   | Front Side Maximum Static Loading                 | Up to 5 |
| Short Circuit Current Isc(A)  | 11.30  | 11.35  | 11.39  | 11.44  | 11.49  | 11.54  | 11.59  | *Remark:Do not connect Fuse in Combiner Box with   | two or more strings in para | Rear Side Maximum Static Loading allel connection | Up to 2 |
| *NMOT:Irradiance 800W/m <sup>2</sup> ,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s PACKAGING CONFIGURATION * |        |        |        |        |        |        |  | *Remark:Electrical data in this catalog do not refer to a single module and they are not part of the offer.<br>They only serve for comparison among different module types.<br>*Caution:Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills<br>and please carefully read the safety and installation instructions before using our PV modules. |                             |   |         |

| Piece/Box  | 36  |
|--|-----|
| Piece/Container(40'HQ)                           | 720 |
| *Customized packaging is available upon request. |     |

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