ZNShine Solar

ZXM7-SH108 Series

10BB HALF-CELL Black Monocrystalline PERC PV Module

<table>
<thead>
<tr>
<th>Power Range</th>
<th>Maximum Efficiency</th>
<th>Yearly Degradation</th>
</tr>
</thead>
<tbody>
<tr>
<td>390-410W</td>
<td>21.00%</td>
<td>0.55%</td>
</tr>
</tbody>
</table>

12 Years Product Warranty   25 Years Output Guarantee

**KEY FEATURES**

*Please check the valid version of Limited Product Warranty which is officially released by ZNShine Solar Co., Ltd.*

Excellent Cells Efficiency
MBB technology reduces 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.

Improved Aesthetics
Compared to conventional modules, this full black module has a more uniform appearance and superior aesthetics.

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 Management System
Warranted reliability and stringent quality assurances well beyond certified requirements.

**Founded in 1988, ZNShine Solar is a world’s leading high-tech PV module manufacturer. With the advanced production lines, the company boasts module capacity of 650W. 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.**
ZXM7-SH108 Series | Znshinesolar 10BB HALF-CELL Black Monocrystalline PERC PV Module

DIMENSIONS OF PV MODULE (mm)

Front View  Back View

I-V CURVES OF PV MODULE (400W)

P-V CURVES OF PV MODULE (400W)

**ELECTRICAL CHARACTERISTICS | STC**

<table>
<thead>
<tr>
<th>Nominal Power Watt</th>
<th>Pmax(W)</th>
<th>390</th>
<th>395</th>
<th>400</th>
<th>405</th>
<th>410</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power Voltage Vmp(V)</td>
<td>30.50</td>
<td>30.70</td>
<td>30.90</td>
<td>31.10</td>
<td>31.30</td>
<td></td>
</tr>
<tr>
<td>Maximum Power Current Imp(A)</td>
<td>12.79</td>
<td>12.87</td>
<td>12.95</td>
<td>13.03</td>
<td>13.10</td>
<td></td>
</tr>
<tr>
<td>Open Circuit Voltage Voc(V)</td>
<td>36.70</td>
<td>36.90</td>
<td>37.10</td>
<td>37.30</td>
<td>37.50</td>
<td></td>
</tr>
<tr>
<td>Short Circuit Current Isc(A)</td>
<td>13.56</td>
<td>13.63</td>
<td>13.70</td>
<td>13.77</td>
<td>13.84</td>
<td></td>
</tr>
<tr>
<td>Module Efficiency (%)</td>
<td>19.97</td>
<td>20.23</td>
<td>20.48</td>
<td>20.74</td>
<td>21.00</td>
<td></td>
</tr>
</tbody>
</table>

**MATERIAL DATA**

- Solar cells: Mono PERC
- Cells orientation: 108 (6x18)
- Module dimension: 1722x1134x30 mm (With Frame)
- Weight: 20.5±1.0 kg
- Glass: 3.2mm, High Transmission, AR Coated Tempered Glass
- Junction box: IP 68, 3 diodes
- Cables: 4 mm², 350 mm (With Connectors)
- Connectors*: MGC-compatible

**ELECTRICAL CHARACTERISTICS | NMOT**

| Maximum Power Pmax(Wp) | 291.50 | 295.20 | 299.00 | 302.70 | 306.30 |
| Maximum Power Voltage Vmp(V) | 28.30 | 28.50 | 28.70 | 28.90 | 29.10 |
| Maximum Power Current Imp(A) | 10.29 | 10.35 | 10.41 | 10.47 | 10.53 |
| Open Circuit Voltage Voc(V) | 34.30 | 34.50 | 34.70 | 34.80 | 35.00 |
| Short Circuit Current Isc(A) | 10.95 | 11.01 | 11.06 | 11.12 | 11.18 |

**WORKING CONDITIONS**

- Maximum system voltage: 1500 V DC
- Temperature coefficient of Pmax: ~0.35%/ºC
- Temperature coefficient of Voc: ~0.29%/ºC
- Maximum series fuse: 25 A
- Front Side Maximum Static Loading: Up to 1400 Pa
- Rear Side Maximum Static Loading: Up to 2400 Pa

**PACKAGING CONFIGURATION**

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

*Remark: Please refer to regional datasheet for specified connector.
*Remark: Please read all safety and installation instructions before using our PV modules.

Add: 14, Zhaiji Industrial Zone, jinlanjiangsu 213251, P.R. China  Tel: +86 519 6502233  E-mail: info@znshinesolar.com

Note: Specifications included in this datasheet are subject to change without notice. ZNSHINE reserves the right of final interpretation © ZNSHINE SOLAR 2022 | Version: ZXM7-SH108 2023 E