## **ZXM5** | 96 Cells



### 250 - 275 Watt

### Monocrystalline photovoltaic module (alu and black)

ZXM5-96 is one of ZNSHINE SOLAR's most popular and compact monocrystalline panels. Versatile and adaptable, with a power output ranging from 250 Wp up to 275 Wp (black modules up to 270 Wp), it is perfect for residential rooftop systems as well as for ground-mounted installations.



High module conversion efficiency up to 16,16 %



Insured output warranty of 25 years



Green Certifications: PV-Cycle, carbon footprint and RoHS



Without Potential-Induced Degradation (PID-free)



Resistant against ammonia and salt mist



Certified to withstand extreme snowloads of 5.400 Pascal

This module is made of reliable and carefully selected components. With a 25-year output warranty and a 10-year workmanship warranty, ZXM5-96 meets rigorous quality controls and international standard such as ISO 9001, ISO 14001 and OHSAS 18001. The panel is tested by widely acknowledged certifying institutions such as TÜV Süd. The recycling of this module at the product's end of life follws the prescriptions of PV-CYCLE Association certification.





## 25 years power output guarantee insured by PowerGuard

ZNSHINE SOLAR is one of the first manufacturers whose modules participate in the PowerGuard insurance programme, guaranteeing an output of 90% for 10 years and of 80% for 25 years even in the unlikely case of manufacturer's insolvency.



The carbon emission of this solar module is 316 kg CO<sub>2</sub> equivalent. This result was calculated in 07.2012.















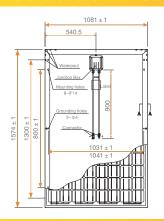




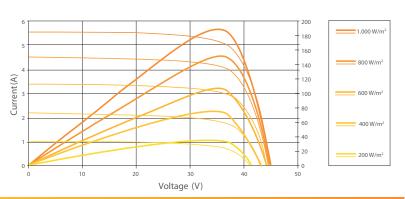
# **ZXM5** | 96 Cells

#### Dimensions of the PV module

#### I-V Curves of the PV module







Electrical Data	ZXM5-96- 250/MS	ZXM5-96-255/MS	ZXM5-96-260/MS	ZXM5-96-265/MS	ZXM5-96-270/MS	ZXM5-96-275/MS <sup>2</sup>
Nominal Power Watt P <sub>max</sub> (W <sub>p</sub> )	250	255	260	265	270	275
Power Output Tolerance P <sub>max</sub> (%)	0 ~ +3	0 ~ +3	0 ~ +3	0 ~ +3	0 ~ +3	0 ~ +3
${\sf Maximum\ Power\ Voltage\ V}_{\sf max}({\sf V})$	48.70	49.00	49.30	49.40	49.50	49.50
Maximum Power Current $I_{_{\mathrm{Mpp}}}$ (A)	5.14	5.21	5.27	5.36	5.45	5.56
Open Circuit Voltage V <sub>oc</sub> (V)	59.60	59.80	60.00	60.10	60.40	60.60
Short Circuit Current I <sub>sc</sub> (A)	5.49	5.55	5.64	5.73	5.83	5.94
Module Efficiency $\eta_{_m}(\%)$	14.69	14.99	15.28	15.57	15.87	16.16
Cell Efficiency η <sub>ε</sub> (%)	17.16	17.54	17.92	18.31	18.69	19.07

#### **Mechanical Data**

Solar Cells Mono 125 × 125 mm

Cells Orientation 96  $(8 \times 12)$ 

**Module Dimensions**  $1574 \times 1081 \times 40 \text{ mm} / 45 \text{ mm}$ 

Weight 22.0 kg

Glass High transparency, low Iron,

AR-coating, tempered glass 3.2 mm

Frame Anodized Aluminium alloy. Frame and

backside in alu or black

Junction Box IP 65

Cables/Connector 4 mm<sup>2</sup>, 900 mm, MC4-compatible

Number of Diodes 4

#### Warranty Information

10 years workmanship warranty

10 years warranty at 90% power output

+ further 15 years warranty at 80% power output

#### Temperature Ratings

Nominal Operating Cell Temperature 45 °C ( $\pm 2$  °C) Temperature Coefficient of P<sub>mpn</sub> -0.42 %/K

Temperature Coefficient of V<sub>oc</sub> -0.29 %/K
Temperature Coefficient of I<sub>c</sub> 0.04 %/K

W 11 6 11.

Working Conditions

**Maximum System Voltage** 1000 V DC (TÜV)

**Operating Temperature** from -40 to +85 °C

Maximum Series Fuse 10 A

Maximum Load (Snow/Wind) 5400 Pa / 2400 Pa

Ammonia-/Salt Mist Resistance IEC 62716, 61701 ✓

#### Packaging Information

**Module per Box** 26 pcs. (40 mm) 24 pcs. (45 mm)

Module per 40' HQ Container 728 pcs. (40 mm)

672 pcs. (45 mm)

1 Measuremen Tolerance STC: ± 3% ( $P_{max}$ ), ± 10% ( $V_{max}$ /  $M_{pop}$ /  $V_{ex}$ /  $V_{ex}$ /  $V_{ex}$ , Values at Standard Test Conditions STC (Air Mass AM 1,5, Irradiance 1000 W/m², Cell Temperature 25 °C)

Remark: Please read safety and installation instructions before using the product | Subject to change without prior notice © ZNSHINE SOLAR 2013 | Versionscode: ZXM5-96-1307.E

#### **ZNSHINE PV-Tech Co., Ltd**

#1 Zhixi Industry Zone Jintan, Jiangsu Province, 213251 People´s Republic of China Tel: +86 519 8244 9237 Fax: +86 519 8244 9170 E-Mail: info@znshinesolar.com

