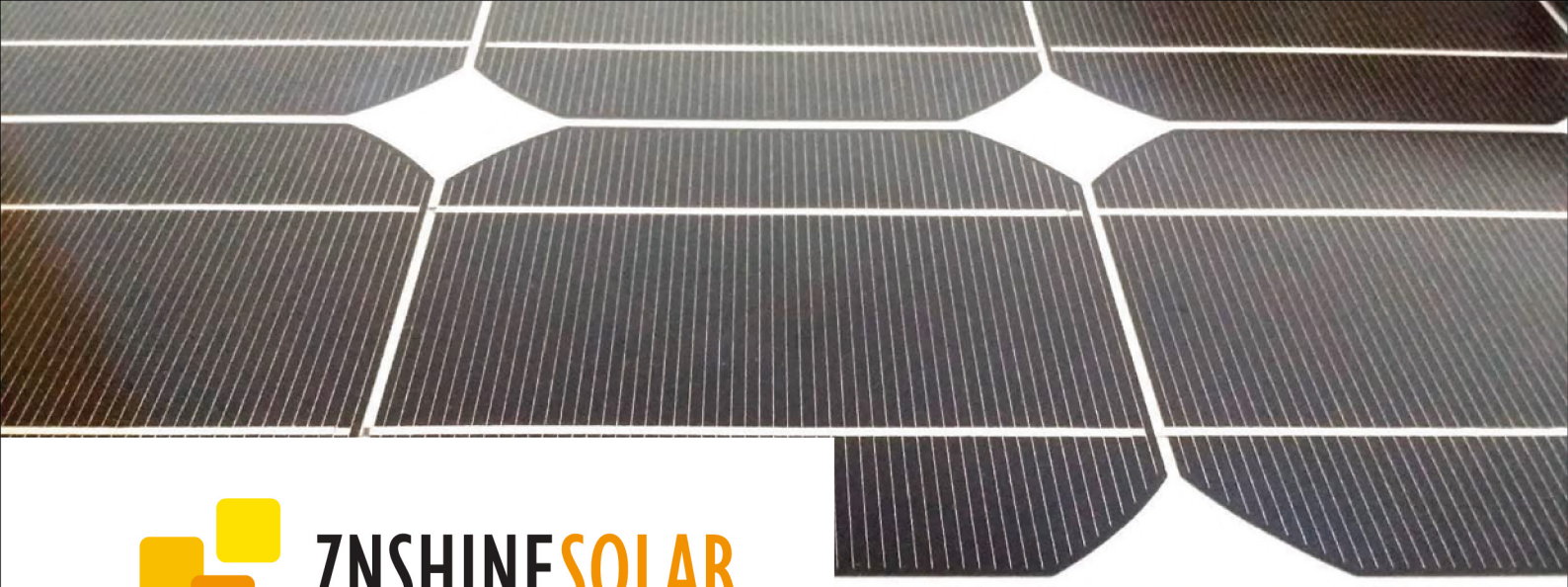
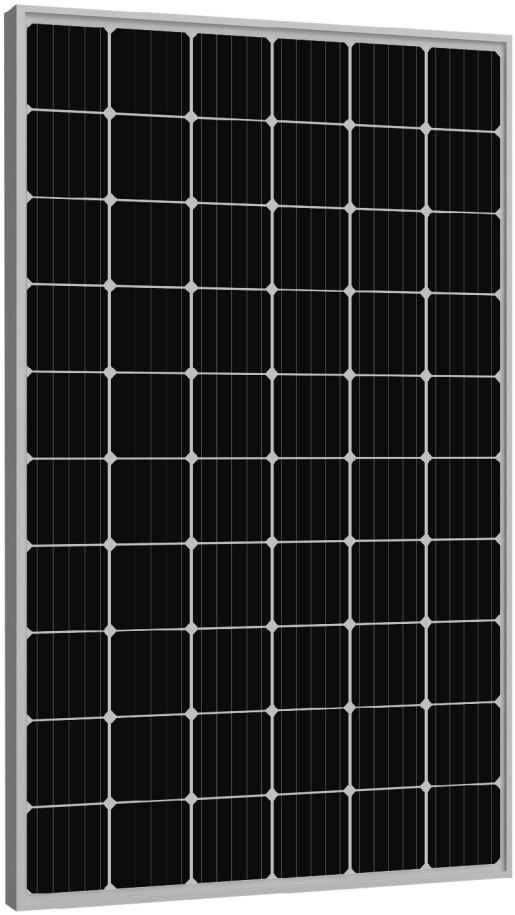


ZNSHINESOLAR

ZXM6 | 60 Cells

Monocrystalline PV module 280-310 Watt



Made with selected materials and components to grant quality, duration, efficiency and through outputs, the 60-cell monocrystalline modules by ZNSHINE SOLAR(power output 280 up to 310Wp, black modules up to 310Wp) represent a highly flexible solution for diverse installation types, from industrial rooftop plants to small home PV systems or large ground surfaces. This allows you to produce clean energy whilst reducing your energy bill.

ZNSHINE SOLAR' S 60-cell monocrystalline solar modules are tested and approved by international acknowledged laboratories, so that we can offer our customers a reliable and price-quality optimized product. The linear warranty on product outputs further ensures increased security and return on investments over time.

- High Efficiency — High module efficiency up to 18.94%
- Linear Warranty — 25-year-linear warranty on outputs
- 5400 Pa — Certified to withstand extreme static loads of 5400 Pa
- PID free — Free from PID (Potential Induced Degradation)
- Extensive green certificates
- System Certification — ISO 9001, ISO 14001, OHSAS 18001

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Znshine reserves the final right of interpreting the technical change and testing conditions.

ZXM6 60/280-310

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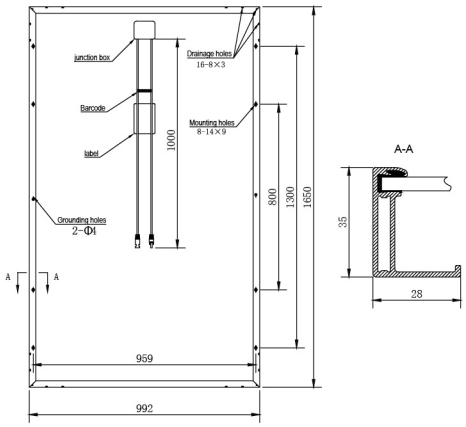
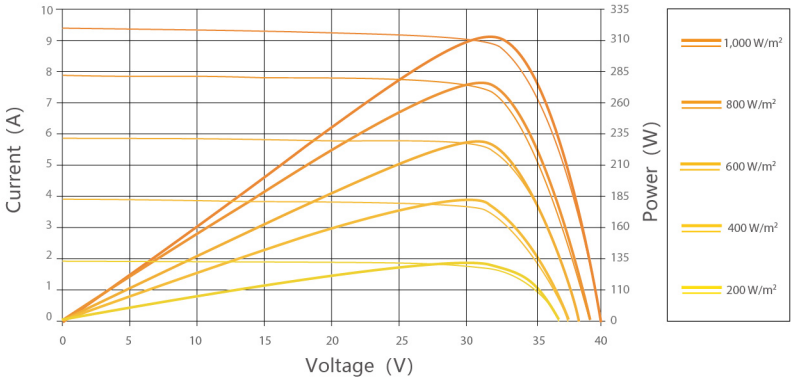
Dimension of the PV module



I-V Curves of the PV module



Electrical data

Model	ZXM6-60-280/M	ZXM6-60-285/M	ZXM6-60-290/M	ZXM6-60-295/M	ZXM6-60-300/M	ZXM6-60-305/M	ZXM6-60-310/M
Nominal Power Watt $P_{max}(W_p)$	280	285	290	295	300	305	310
Power Output Tolerance P_{max}(%)	0~+3	0~+3	0~+3	0~+3	0~+3	0~+3	0~+3
Maximum Power Voltage V_{mp}(V)	31.71	31.85	32.16	32.42	32.54	32.80	33.02
Maximum Power Current I_{mp}(A)	8.83	8.95	9.02	9.10	9.22	9.30	9.39
Open Circuit Voltage V_{oc}(V)	38.48	38.59	38.86	39.32	39.56	39.80	40.00
Short Circuit Current I_{oc}(A)	9.47	9.59	9.66	9.68	9.75	9.82	9.90
Module Efficiency η_m(%)	17.11	17.41	17.72	18.02	18.33	18.63	18.94

Mechanical data

Solar cells	Mono 156×156 / 156.75×156.75 mm
Cells orientation	60 (6×10)
Module dimension	1650×992×35 mm
Weight	19.5 kg
Glass	High transparency,low iron,tempered glass 3.2 mm (AR-coating)
Junction box	IP 68, 3 diodes
Cables	4 mm² ,1000 mm
Connectors	MC4-compatible

Temperature ratings

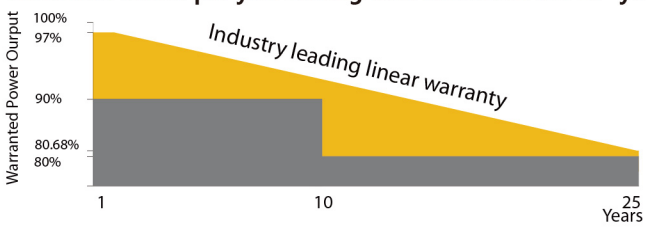
Nominal Operating Cell Temperature	45℃ ±2℃
Temperature coefficient of P_{max}	-0.41%/K
Temperature coefficient of V_{oc}	-0.29%/K
Temperature coefficient of I_{sc}	0.04%/K

Working conditions

Maximum system voltage	1000 / 1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	15 A
Maximum load (snow/wind)	5400 Pa / 2400 Pa

Warranty information

10 years workmanship warranty
25 years output warranty(monocrystalline):3.0% in the 1st year, thereafter 0.68% per year ending with 80.68% in the 25th year



Packaging information

Modules per box	30 pcs.(35 mm)
Modules per 40' HQ container	896 pcs.(35 mm)

Measurement Tolerance STC: ±3% (P_{max}), ±10%(V_{max}, I_{Mpp}, V_{oc}, I_{sc}), Values at Standard Test Conditions STC(Air Mass AM1,5, Irradiance 1000W/m², Cell Temperature 25℃) | Remark: please read safety and installation instructions before using the product | Subject to change without prior notice © ZNSHINE SOLAR 2018 | Version: ZXM6-60-1805.E