ZXM6-NHDB144 **Series**

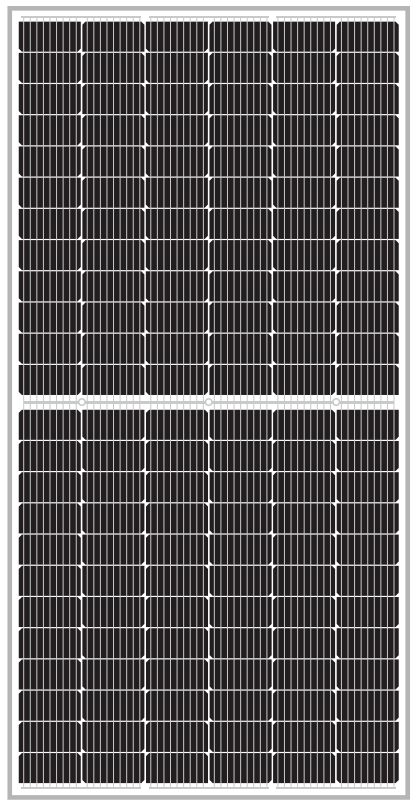
Znshinesolar 9BB **HALF-CELL** **Bifacial** Mono PERC PV Module

ZNSHINESOLAR

144

Mono Poly Solutions

420W | 425W | 430W | 435W | 440W | 445W

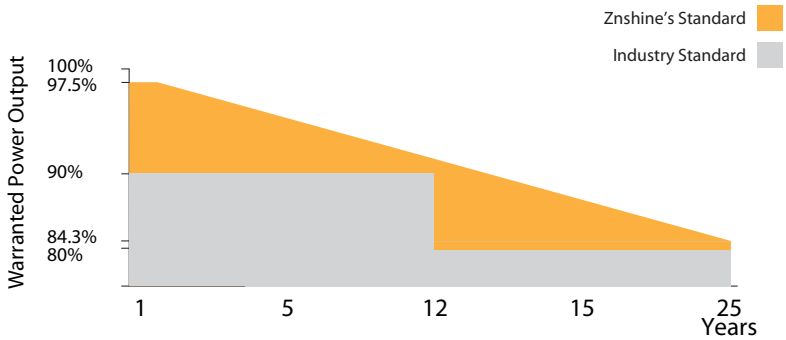


Made with selected materials and components to grant quality, duration, efficiency and through outputs, the ZXM6-NHDB144 double glass modules by ZNSHINE SOLAR feature have both decorative and shading functions.They represent the perfect choice for BIPV and BAPV construction applications. This allows you to produce clean energy whilst reducing your energy bill.

ZNSHINE SOLAR' S ZXM6-NHDB144 double glass solar modules are tested and approved by international acknowledged laboratories, so that we can offer our customers a reliable and price-quality optimized product.

12 years product warranty/25 years output warranty

0.55% Annual Degradation over 25 years



More power output

Module RS decreases, FF (fill factor) increases, power gain is stable above 1.5%, and can be increased by 5~10W

High Efficiency

Graphene coating can increase about 2W of the module efficiency by rising around 0.5% of the light transmission

Anti PID

Limited power degradation of ZXM6-NHDB144 module caused by PID effect is guaranteed under strict testing condition for mass production

Better Weak Illumination Response

Lower temperature coefficient and wide spectral response, higher power output, even under low-light settings

Bifacial technology

Enables additional energy harvesting from rear side(up to 25%)

Grahpene Coating

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

ZNShine PV-Tech Co., LTD, founded in 1988, is a world-leading high-performance PV module manufacturer, PV power station developer, EPC and power station operator. With its state-of-the-art production lines, the company boasts module output of 5GW. Bloomberg has listed ZNShine as a global Tier 1 PV manufacturer and Top 4 reliable PV supplier.

www.znshinesolar.com

ZXM6-NHDB144 **Series**

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Mono PERC PV Module

ZNSHINESOLAR

ELECTRICAL PROPERTIES | STC*

Module Type	ZXM6-NHDB144 -420/M	ZXM6-NHDB144 -425/M	ZXM6-NHDB144 -430/M	ZXM6-NHDB144 -435/M	ZXM6-NHDB144 -440/M	ZXM6-NHDB144 -445/M
Nominal Power Watt Pmax(W)	420	425	430	435	440	445
Power Output Tolerance Pmax(%)	0~+3	0~+3	0~+3	0~+3	0~+3	0~+3
Maximum Power Voltage Vmp(V)	40.9	41.1	41.3	41.5	41.7	41.9
Maximum Power Current Imp(A)	10.27	10.35	10.42	10.49	10.56	10.63
Open Circuit Voltage Voc(V)	49.3	49.5	49.7	49.9	50.1	50.3
Short Circuit Current Isc(A)	10.93	11.00	11.07	11.14	11.21	11.28
Module Efficiency (%)	19.10	19.33	19.56	19.79	20.01	20.24

*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃, AM 1.5
*The data above is for reference only and the actual data is in accordance with the pratical testing

ELECTRICAL PROPETIES | NMOT*

Maximum Power Pmax(Wp)	312.9	316.7	320.3	323.9	327.6	330.6
Maximum Power Voltage Vmpp(V)	37.8	38.0	38.2	38.4	38.5	38.7
Maximum Power Current Impp(A)	8.28	8.34	8.39	8.44	8.50	8.53
Open Circuit Voltage Voc(V)	45.9	46.1	46.3	46.5	46.6	46.8
Short Circuit Current Isc(A)	8.83	8.88	8.94	8.99	9.05	9.11

*NMOT(Nominal module operating temperature):Irradiance 800W/m²,Ambient Temperature 20℃,AM 1.5,Wind Speed 1m/s
*The data above is for reference only and the actual data is in accordance with the pratical testing

Electrical characteristics with 25% rear side power gain

Front power Pmax/W	420	425	430	435	440	445
Total power Pmax/W	525	531	538	544	550	556
Vmp/V(Total)	41.0	41.2	41.4	41.6	41.8	42.0
Imp/A(Total)	12.81	12.89	13.00	13.08	13.16	13.24
Voc/V(Total)	49.4	49.6	49.8	50.0	50.2	50.4
Isc/A(Total)	13.47	13.54	13.65	13.73	13.81	13.89

TEMPERATURE RATINGS

NMOT	44℃ ±3℃
Temperature coefficient of Pmax	-0.36%/℃
Temperature coefficient of Voc	-0.29%/℃
Temperature coefficient of Isc	0.05%/℃
Refer.Bifacial Factor	70±5%

*Do not connect Fuse in Combiner Box with two or more strings in parallel connection

WORKING CONDITIONS

Maximum system voltage	1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	20 A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

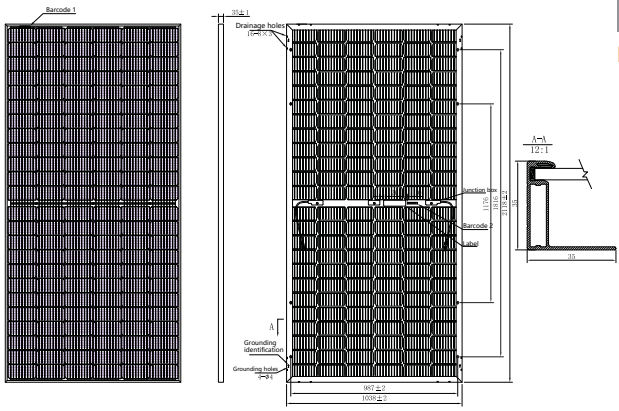
MECHANICAL DATA

Solar cells	Mono PERC 166*83mm
Cells orientation	144 (6×24)
Module dimension	2118×1038×35 mm(With Frame)
Weight	24.5 kg
Glass	High transparency,low iron,tempered
	Glass 3.2 mm (AR-coating)
Junction box	IP 68, 3 diodes
Cables	4 mm² ,1100 mm
Connectors	MC4-compatible

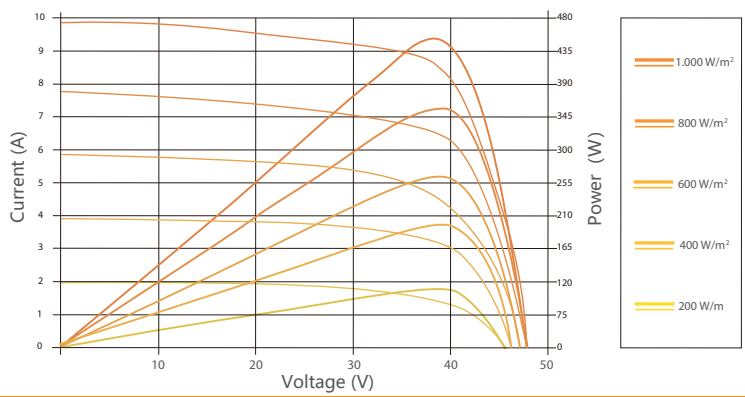
PACKAGING INFORMATION

Packing Type	40' HQ
Piece/Box	30
Piece/Container	660

DIMENSION OF THE PV MODULE (mm)



I-V CURVES OF THE PV MODULE



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