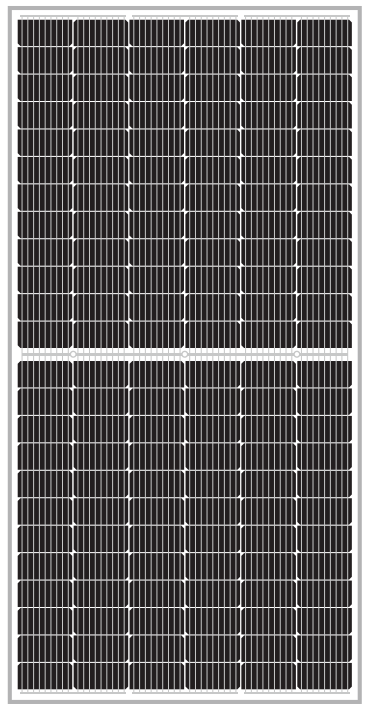
ZXM6-NHLD144 Series

Znshinesolar 9BB HALF-CELL Light-Weight Double Glass Monocrystalline PERC PV Module

ZNSHINESOLAR

430W | 435W | 440W | 445W | 450W | 455W



Excellent cells efficiency

9BB technology decreases the distance between bus bars and finger grid line which is benefit to power increase.

Better Weak Illumination Response

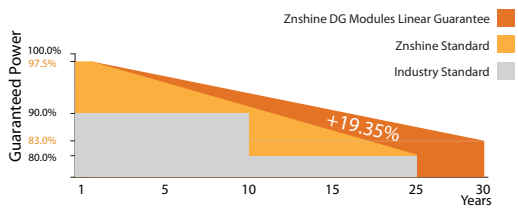
More power output in weak light condition, such as haze, cloudy, and morning

Anti PID

Limited power degradation caused by PID effect is guaranteed under strict testing condition for mass production

High wind and snow resistance

- 5400 Pa snow load
- 2400 Pa wind load



30 years power warranty

After 30 years our solar panel keeps at least 80% of its initial power output

12 years product guarantee
30 years output guarantee

0.5% annual degradation over 30 years

Easy to install

Frame design makes module compatible with all racking and installation methods

Founded in 1988, ZNShine solar is a world's leading high-tech PV module manufacturer. With the state-of-the-art production lines, the company boasts module capacity of 6GW. 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.

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Double Glass Monocrystalline PERC PV Module

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ELECTRICAL CHARACTERISTICS | STC*

Nominal Power Watt Pmax(W)*	430	435	440	445	450	455
Power Output Tolerance Pmax(%)	0~+3	0~+3	0~+3	0~+3	0~+3	0~+3
Maximum Power Voltage Vmp(V)	40.60	40.80	41.00	41.20	41.40	41.60
Maximum Power Current Imp(A)	10.60	10.67	10.74	10.81	10.87	10.94
Open Circuit Voltage Voc(V)	49.10	49.30	49.50	49.70	49.90	50.10
Short Circuit Current Isc(A)	11.10	11.17	11.25	11.32	11.37	11.44
Module Efficiency (%)	19.78	20.01	20.24	20.47	20.70	20.93

*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25℃, AM 1.5
*Measuring tolerance: ±3%

ELECTRICAL CHARACTERISTICS | NMOT*

Maximum Power Pmax(Wp)	321.00	324.70	328.40	332.10	335.50	339.20
Maximum Power Voltage Vmpp(V)	38.00	38.20	38.30	38.50	38.80	39.00
Maximum Power Current Impp(A)	8.45	8.50	8.56	8.62	8.65	8.71
Open Circuit Voltage Voc(V)	45.80	46.00	46.20	46.30	46.50	46.70
Short Circuit Current Isc(A)	8.97	9.02	9.09	9.14	9.18	9.24

*NMOT(Nominal module operating temperature):Irradiance 800W/m²,Ambient Temperature 20℃,AM 1.5,Wind Speed 1m/s

MECHANICAL DATA

Solar cells	Mono PERC
Cells orientation	144 (6×24)
Module dimension	2094×1038×30 mm(With Frame)
Weight	28 kg
Glass	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Junction box	IP 68, 3 diodes
Cables	4 mm² ,350 mm
Connectors	MC4-compatible

TEMPERATURE RATINGS

NMOT	44℃ ±2℃
Temperature coefficient of Pmax	-0.36%/℃
Temperature coefficient of Voc	-0.29%/℃
Temperature coefficient of Isc	0.05%/℃

WORKING CONDITIONS

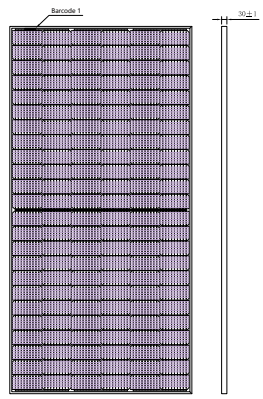
Maximum system voltage	1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	20 A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

*Do not connect Fuse in Combiner Box with two or more strings in parallel connection
*Remark:Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types.

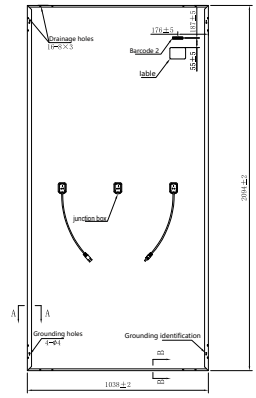
PACKAGING CONFIGURATION

Piece/Box	36
Piece/Container(40'HQ)	792
Piece/Container(with additional small package)	/

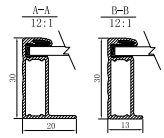
DIMENSIONS(MM)



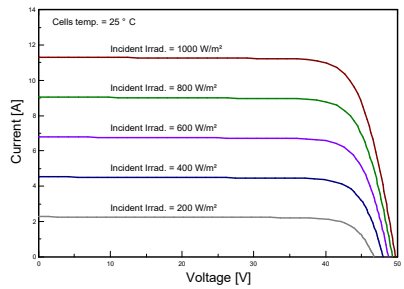
Front View



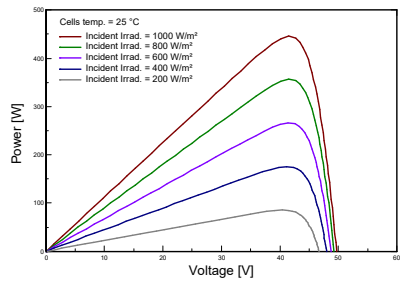
Back View



I-V CURVES OF PV MODULE(445W)



P-V CURVES OF PV MODULE(445W)



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