

ZXM7-UH108 Series

16BB HALF-CELL Black N-Type TOPCon Monocrystalline PV Module



Znshine Standard Common Standard 99% 90% 87.00% 1 5 12 15 25 Years *Please check the valid version of Limited Product Warranty which is officially released by ZNSHINE PV-TECH Co.,Ltd.

ISO 14001: Environmental Managerment System

ISO 9001: Quality Managerment System

ISO45001: Occupational Health and Safety Managerment System

*As there are different certification requirements in different markets.please contact your local znshine sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

KEY FEATURES



Excellent Cells Efficiency

SMBB technology reduce 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 modules have 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.



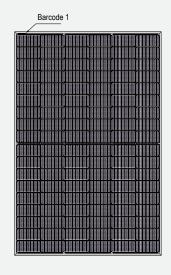
Excellent Quality Managerment System

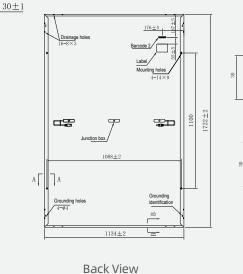
Warranted reliability and stringent quality assurances well beyond certified requirements.

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 10 GW. 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.



DIMENSIONS OF PV MODULE(mm)

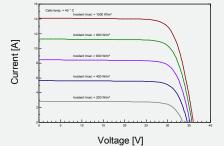




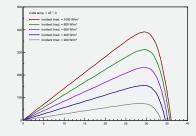
Front View

*Remark: customized frame color and cable length available upon request

I-V CURVES OF PV MODULE(415W)



P-V CURVES OF PV MODULE(415W)



≥ Power [

Voltage [V]

ELECTRICAL CHARACTERISTICS | STC*

MECHANICAL DATA

Nominal Power Watt Pmax(W)*	410	415	420	425	430	Solar cells	N-type Monocrystalline
Maximum Power Voltage Vmp(V)	31.10	31.30	31.50	31.70	31.90	Cells orientation	108 (6×18)
Maximum Power Current Imp(A)	13.19	13.26	13.34	13.41	13.47	Module dimension	1722×1134×30 mm (With Frame)
Open Circuit Voltage Voc(V)	37.70	37.90	38.10	38.30	38.50	Weight	20.5±1.0 kg
Short Circuit Current Isc(A)	13.91	13.99	14.07	14.15	14.23	Glass	3.2mm, High Transmission, AR Coated Tempered Glass
Module Efficiency (%)	21.00	21.25	21.51	21.76	22.02	Junction box	IP 68, 3 diodes
*The data above is for reference only and the actual data is in accordance with the pratical testing						Cables	4 mm² ,350mm (With Connectors)

TC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25±2°C, AM 1.5

*Measuring uncertainity: ±3%, all the electrical characteristics such as Power, Im, Vm and FF are within ±3% tolerance.

ELECTRICAL CHARACTERISTICS | NMOT

Maximum Power Pmax(Wp)	309.70	313.10	317.20	320.90	324.30
Maximum Power Voltage Vmpp(V)	29.30	29.50	29.70	29.90	30.10
Maximum Power Current Impp(A)	10.55	10.61	10.67	10.73	10.78
Open Circuit Voltage Voc(V)	35.60	35.80	36.00	36.10	36.30
Short Circuit Current Isc(A)	11.23	11.28	11.34	11.39	11.45
*NMOT:Irradiance 800W/m²,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s					

Connectors*	MC4-compatible					
*Please refer to regional da TEMPERATURE RA		d connector WORKING CONDITIONS				
NMOT		44℃ ±2℃	Maximum system voltage	1500 V DC		
Temperature coefficie	ent of Pmax	(-0.30±0.03)%/°C	Operating temperature	-40°C~+85°C		
Temperature coefficie	ent of Voc	-0.25%/°C	Maximum series fuse	25 A		
Temperature coefficient of lsc		0.046%/°C	Front Side Maximum Static Loading	Up to 5400 Pa		

Rear Side Maximum Static Loading Up to 2400 Pa

rk: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.

*Caution:Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules

PACKAGING CONFIGURATION*

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

*Customized packaging is available upon request.

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