



ZXMR-UPLD132 Series

SMBB HALF-CELL N-Type Monofacial Double Glass
Monocrystalline PV Module

590-620W

POWER RANGE

22.95%

MAXIMUM EFFICIENCY

0.40%

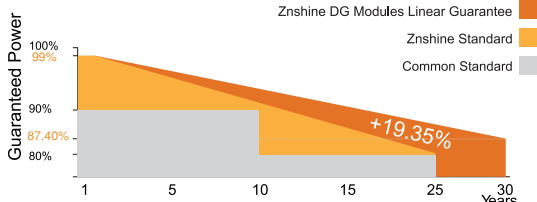
YEARLY DEGRADATION



12 YEARS PRODUCT WARRANTY



30 YEARS OUTPUT GUARANTEE



*Please check the Limited Warranty for Standard PV Modules which is officially released by ZNSHINE PV-TECH Co., Ltd.



IEC 61215/IEC 61730

ISO 14001: Environmental Management System

ISO 9001: Quality Management System

ISO45001: Occupational Health and Safety Management 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.



Better Weak Illumination Response

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



Anti PID

Ensured PID resistance through the quality control of cell manufacturing process and raw materials.



Adapt To Harsh Outdoor Environment

Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity environment.



TIER 1

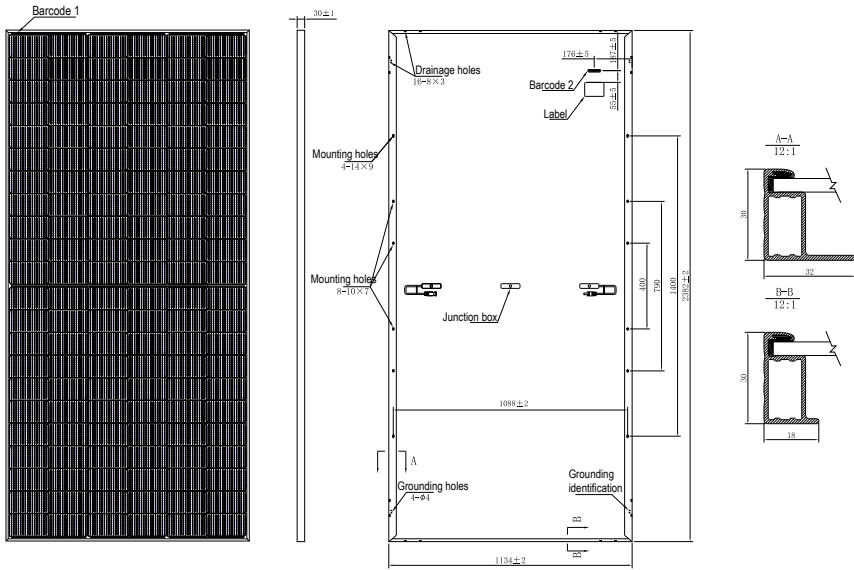
Global, Tier 1 bankable brand, with independently certified advanced automated manufacturing.



Excellent Quality Management System

Warranted reliability and stringent quality assurances well beyond certified requirements.

DIMENSIONS OF PV MODULE(mm)

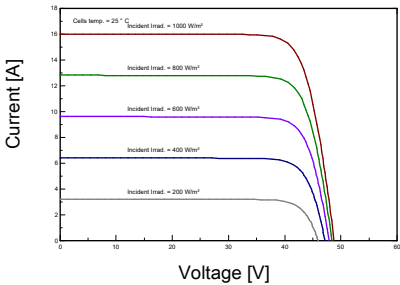


Front View

Back View

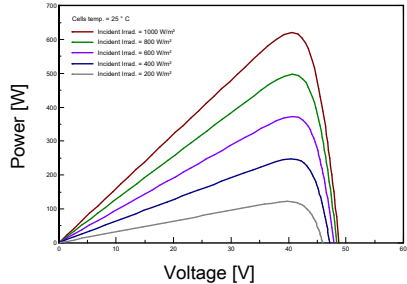
*Remark: customized frame color and cable length available upon request

I-V CURVES OF PV MODULE(620W)



Voltage [V]

P-V CURVES OF PV MODULE(620W)



Voltage [V]

ELECTRICAL CHARACTERISTICS STC*								MECHANICAL DATA	
Nominal Power Watt Pmax(W)*	590	595	600	605	610	615	620	Solar cells	N-type Monocrystalline, Rectangular cells
Maximum Power Voltage Vmp(V)	39.70	39.90	40.10	40.30	40.50	40.70	40.90	Cells orientation	132 (6×22)
Maximum Power Current Imp(A)	14.87	14.92	14.97	15.02	15.07	15.12	15.17	Module dimension	2382×1134×30mm (With Frame)
Open Circuit Voltage Voc(V)	47.60	47.80	48.00	48.20	48.40	48.60	48.80	Weight	33±1.0 kg
Short Circuit Current Isc(A)	15.74	15.79	15.84	15.89	15.94	15.99	16.04	Glass	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Module Efficiency (%)	21.84	22.03	22.21	22.40	22.58	22.77	22.95	Junction box	IP 68, 3 diodes
								Cables	4 mm² 1200mm (With Connectors)
								Connectors*	MC4-EVO2 compatible

ELECTRICAL CHARACTERISTICS NMOT								TEMPERATURE RATINGS		WORKING CONDITIONS	
Maximum Power Pmax(Wp)	449.00	452.70	456.40	460.10	463.80	467.60	471.30	NMOT	44°C ±2°C	Maximum system voltage	1500 V DC
Maximum Power Voltage Vmp(V)	37.20	37.40	37.60	37.80	38.00	38.20	38.30	Temperature coefficient of Pmax	(-0.28~0.028)%/°C	Operating temperature	-40°C~+85°C
Maximum Power Current Imp(A)	12.06	12.10	12.14	12.18	12.21	12.25	12.29	Temperature coefficient of Voc	-0.23%/°C	Maximum series fuse	25 A
Open Circuit Voltage Voc(V)	45.10	45.30	45.50	45.70	45.90	46.00	46.20	Temperature coefficient of Isc	0.045%/°C	Front Side Maximum Static Loading	Up to 5400 Pa
Short Circuit Current Isc(A)	12.70	12.74	12.78	12.82	12.86	12.90	12.94			Rear Side Maximum Static Loading	Up to 2400 Pa
								*Remark: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)	720

*Customized packaging is available upon request.

 Add :No. 229 Tongda Avenue Suqian Economic and Technological Development Zone 223800 Suqian City, Jiangsu P.R. China

 Tel: +86 519 6822 0233

 E-mail: info@znshinesolar.com

Note: Specifications included in this datasheet are subject to change without notice.ZNSHINE reserves the right of final interpretation © ZNSHINE SOLAR 2024 | Version: ZXMR-UPLD132 2409.E

No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document