ZXM7-SP144 Series

Znshinesolar 10BB HALF-CELL Monocrystalline PERC PV Module



520W | 525W | 530W | 535W | 540W



Excellent cells efficiency

MBB 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

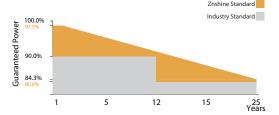
Limited power degradation caused by PID effect is guaranteed under strict testing condition for mass production



High wind and snow resistance

■ 5400 Pa snow load

■ 2400 Pa wind load





25 years power warranty

After 25 years our solar panel keeps at least 80% of its initial power output



12 years product warranty 25 years output warranty



0.55% Annual Degradation over 25 years



Higher lifetime Power Yield

2.5% first year degradation, 0.55% linear degradation































ELECTRICAL CHARACTERISTICS STC*					
Nominal Power Watt Pmax(W)*	520	525	530	535	540
Power Output Tolerance Pmax(%)	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
Maximum Power Current Imp(A)	12.82	12.88	12.94	13.00	13.05
Open Circuit Voltage Voc(V)	48.90	49.10	49.30	49.50	49.70
Short Circuit Current Isc(A)	13.54	13.60	13.66	13.72	13.78
Module Efficiency (%)	20.34	20.54	20.74	20.93	21.13

^{*}STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25°C, AM 1.5

^{*}Measuring tolerance: ±3%

ELECTRICAL CHARACTERISTICS NMOT*						
Maximum Power Pmax(Wp)	388.90	392.60	396.30	400.00	403.50	
Maximum Power Voltage Vmpp(V)	37.80	38.00	38.20	38.30	38.50	
Maximum Power Current Impp(A)	10.29	10.34	10.39	10.43	10.48	
Open Circuit Voltage Voc(V)	45.70	45.90	46.10	46.20	46.40	
Short Circuit Current Isc(A)	10.93	10.98	11.03	11.08	11.13	

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

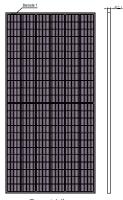
MECHANICAL DATA					
Solar cells	Mono PERC				
Cells orientation	144 (6×24)				
Module dimension	2256×1133×40 mm(With Frame)				
Weight	28.5 kg				
Glass	3.2mm, High Transmission, AR Coated Tempered Glass				
Junction box	IP 68, 3 diodes				
Cables	4 mm² ,350 mm				
Connectors	MC4-compatible				

TEMPERATURE RATINGS		WORKING CONDITIONS		
NMOT	44°C ±2°C	Maximum system voltage	1500 V DC	
Temperature coefficient of Pmax	-0.35%/℃	Operating temperature	-40°C~+85°C	
Temperature coefficient of Voc	-0.29%/℃	Maximum series fuse	25 A	
Temperature coefficient of Isc	0.05%/℃	Maximum load(snow/wind)	5400 Pa / 2400 Pa	

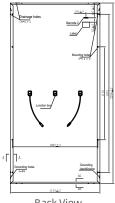
^{*}Do not connect Fuse in Combiner Box with two or more strings in parallel connection *Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types

PACKAGING CONFIGURATION Piece/Box 27 Piece/Container(40'HQ) 540 Piece/Container(with additional small package)

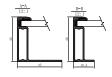
DIMENSIONS(MM)



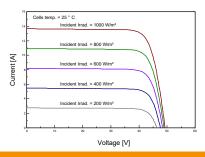
Front View



Back View



I-V CURVES OF PV MODULE(530W)



P-V CURVES OF PV MODULE(530W)

