

# Znshine DG Modules Linear Guarantee Znshine Standard Common Standard Common Standard The standa

# **ZXM7-SHLDD144** Series

10BB HALF-CELL Bifacial Double Glass Monocrystalline PERC PV Module

530-555W

21.48%

0.45%

**POWER RANGE** 

**MAXIMUM EFFICIENCY** 

YEARLY DEGRADATION



12 YEARS PRODUCT WARRANTY









IEC 61215/IEC 61730/IEC 61701/IEC 62716

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**

MBB 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.



### **Bifacial Technology**

Up to 25% additional power gain from back side depending on albedo.



### **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.

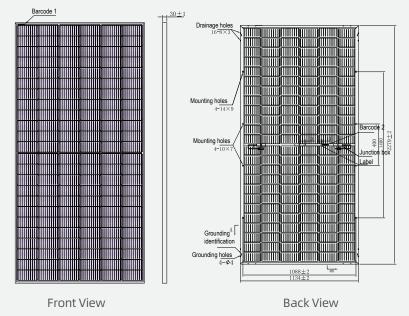


### **Excellent Quality Managerment System**

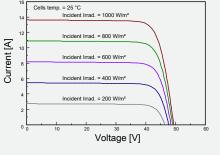
Warranted reliability and stringent quality assurances well beyond certified requirements.



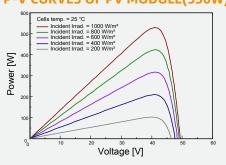
### **DIMENSIONS OF PV MODULE(mm)**







## P-V CURVES OF PV MODULE(530W)



### **ELECTRICAL CHARACTERISTICS | STC\***

Nominal Power Watt Pmax(W)* *(Powerselection: 0~+ SW)	530	535	540	545	550	555
Maximum Power Voltage Vmp(V)	41.10	41.30	41.50	41.70	41.90	42.10
Maximum Power Current Imp(A)	12.91	12.96	13.02	13.07	13.13	13.19
Open Circuit Voltage Voc(V)	49.40	49.60	49.80	50.00	50.20	50.40
Short Circuit Current Isc(A)	13.65	13.71	13.77	13.83	13.89	13.95
Module Efficiency (%)	20.51	20.70	20.89	21.09	21.28	21.48

<sup>\*</sup>The data above is for reference only and the actual data is in accordance with the pratical testing

### **MECHANICAL DATA**

Solar cells	Mono PERC
Cells orientation	144 (6×24)
Module dimension	2279×1134×30 mm (With Frame)
Weight	31.5±1.0 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 (With Connectors)
Connectors*	MC4-compatible

<sup>\*</sup>Please refer to regional datasheet for specified connector

### **ELECTRICAL CHARACTERISTICS | NMOT\***

Maximum Power Pmax(Wp) *(Power selection: 0~+ 5W)	396.40	399.90	403.60	406.80	410.80	414.60
Maximum Power Voltage Vmpp(V)	38.20	38.40	38.50	38.80	38.90	39.10
Maximum Power Current Impp(A)	10.38	10.42	10.47	10.49	10.56	10.61
Open Circuit Voltage Voc(V)	46.20	46.30	46.50	46.70	46.90	47.10
Short Circuit Current Isc(A)	11.02	11.07	11.12	11.17	11.22	11.27
*NMOT:Irradiance 800W/m²,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s						

### **ELECTRICAL CHARACTERISTICS WITH 25% REAR SIDE POWER GAIN\***

Front power Pmax/W	530	535	540	545	550	555
Total power Pmax/W	663	669	675	681	688	694
Vmp/V(Total)	41.20	41.40	41.60	41.80	42.00	42.20
Imp/A(Total)	16.08	16.15	16.23	16.30	16.37	16.44
Voc/V(Total)	49.50	49.70	49.90	50.10	50.30	50.50
Isc/A(Total)	17.02	17.10	17.17	17.25	17.32	17.39

Total power Pmax/W	663	669	675	681	688	694
Vmp/V(Total)	41.20	41.40	41.60	41.80	42.00	42.20
Imp/A(Total)	16.08	16.15	16.23	16.30	16.37	16.44
Voc/V(Total)	49.50	49.70	49.90	50.10	50.30	50.50
Isc/A(Total)	17.02	17.10	17.17	17.25	17.32	17.39
*Difi-1 C-1 Th		_64166-14-				

### **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	30 A
Temperature coefficient of Isc	0.05%/℃	Front Side Maximum Static Loading	Up to 5400Pa
Refer.Bifacial Factor	70±10%	Rear Side Maximum Static Loading	Up to 2400Pa

<sup>\*</sup>Remark: Do not connect Fuse in Combiner Box with two or more strings in parallel connection

### **PACKAGING CONFIGURATION\***

Piece/Box	36
Piece/Container(40'HQ)	720

<sup>\*</sup>Customized packaging is available upon reguest

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<sup>\*</sup>Remark: customized frame color and cable length available upon request

<sup>\*</sup>STC (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.

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

<sup>\*</sup>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