



# ZXM7-UPLD144 Series

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

23.42% 0.40% 575-605W **POWER RANGE** MAXIMUM EFFICIENCY **YEARLY DEGRADATION 12 YEARS PRODUCT WARRANTY** 30 **30 YEARS OUTPUT GUARANTEE** 12 Znshine DG Modules Linear Guarantee Znshine Standard IEC 61215/IEC 61730/IEC 61701/IEC 62716 Common Standard 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.

\*Please check the valid version of Limited Product Warranty which is officially released by ZNSHINE PV-TECH Co.,Ltd.

10

15

25

30 Years

# **KEY FEATURES**

5



Bower Bower

100%

1

## **Ultra Low Carbon**

CO<sub>2</sub> emissions only 10% of the AL frame.



## **High Insulation**

PU composite frame: no grounding, reduce PID risk, improve safety, maintenance free.



# **High Anti PID**

PU composite frame, Super Anti-PID performance.



## **High Anti-Glare**

PU composite frame, Super Anti-Glare performance.



## **Better Weak Illumination Response**

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



### **Corrosion Resistant**

Excellent humidity and heat resistance, anti-salt spray corrosion, suitable for offshore PV stations and other highly corrosive fields.



# TIER 1

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



## **Natural Black Vision**

Solar modules with a PU composite frame have a more uniform appearance and superior aesthetics.

Founded in 2006, ZNShine solar is a world's leading high-tech PV module manufacturer. With the advanced production lines, the company boasts module capacity of 10GW. 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)**





## I-V CURVES OF PV MODULE(575W)



## P-V CURVES OF PV MODULE(575W)



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

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

#### **MECHANICAL DATA**

 $\frac{A-A}{12}$ :

Nominal Power Watt Pmax(W)*	575	580	585	590	595	600	605	Solar cells	N-type Monocrystalline
Maximum Power Voltage Vmp(V)	42.60	42.80	43.00	43.20	43.40	43.60	43.80	Cells orientation	144 (6×24)
Maximum Power Current Imp(A)	13.50	13.56	13.61	13.66	13.72	13.77	13.82	Module dimension	2278×1134×30 mm (With Frame)
Open Circuit Voltage Voc(V)	51.20	51.40	51.60	51.80	52.00	52.20	52.40	Weight	32±1.0 kg
Short Circuit Current Isc(A)	14.24	14.30	14.36	14.42	14.48	14.54	14.60	Glass	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Module Efficiency (%)	22.26	22.45	22.65	22.84	23.03	23.23	23.42	Junction box	IP 68, 3 diodes
*The data above is for reference only and the actual data is in accordance with the pratical testing *STC (Standard Test Condition): Irradiance 1000W/m <sup>2</sup> , Module Temperature 25±2°C, AM 1.5 *Measuring uncertainity: +3% all the electrical characteristics such as Power. In: Ym and FE are within +3% tolerance				5	Cables	4 mm <sup>2</sup> ,350 mm (With Connectors)			

Connectors\*

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

Maximum Power Pmax(Wp)	435.30	439.20	442.90	446.60	450.50	454.30	458.00
Maximum Power Voltage Vmp(V)	39.90	40.10	40.30	40.40	40.60	40.80	41.00
Maximum Power Current Imp(A)	10.90	10.95	11.00	11.04	11.09	11.14	11.18
Open Circuit Voltage Voc(V)	48.30	48.50	48.70	48.90	49.10	49.30	49.50
Short Circuit Current Isc(A)	11.49	11.54	11.59	11.64	11.69	11.73	11.78
*NMOT:Irradiance 800W/m²,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s							

	*Please refer to regional da TEMPERATURE R/			VORKING CONDITIONS			
	NMOT		44℃ ±2℃	Maximum system voltage	1500 V DC		
	Temperature coeffici	ent of Pmax	(-0.30±0.03)%/°C	Operating temperature	-40°C~+85°C		
	Temperature coeffici	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

\*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.

MC4-EVO2 compatible

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.	

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