# ZXM6-NHLD144 Series

Znshinesolar 9BB HALF-CELL Light-Weight Double Glass Mono PV Module

Mono Poly Solutions

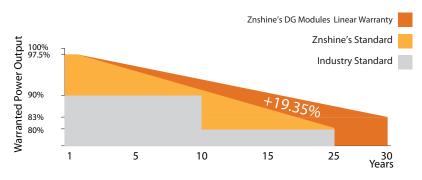
# 420W | 425W | 430W | 435W | 440W | 445W

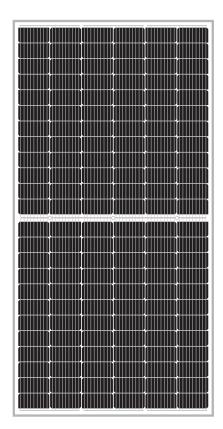
Made with selected materials and components to grant quality, duration, efficiency and through outputs, the ZXM6-NHLD144 double glass modules by ZNSHINE SOLAR feature have both decorative and shading functions. They represent the perfect choice for BIPV and BAPV construction applications. This allows you to produce clean energy whilst reducing your energy bill.

ZNSHINE SOLAR' S ZXM6-NHLD144 double glass solar modules are tested and approved by international acknowledged laboratories, so that we can offer our customers a reliable and price-quality optimized product.

# 12 years product warranty/30 years output warranty

# 0.5% Annual Degradation over 30 years





**ZNSHINESOLAR** 

9BB

### More power output

Module RS decreases, FF (fill factor) increases, power gain is stable above 1.5%, and can be increased by 5~10W



# Anti PID

Limited power degradation of ZXM6-NHLD144 module caused by PID effect is guaranteed under strict testing condition for mass production



# Easy to install

The module is very light in weight so the installation is easier and transport costs are lower



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# **Better Weak Illumination Response**

Lower temperature coefficient and wide spectral response, higher power output, even under low-light settings

Graphene coating can increase about 2W of the module

efficiency by rising around 0.5% of the light transmission



# **Grahpene Coating**

**High Efficiency** 

Graphene coating modules can increase power generation and self-cleaning, also can save maintainance cost

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ZNShine PV-Tech Co., LTD, founded in 1988, is a world-leading high-performance PV module manufacturer, PV power station developer, EPC and power station operator. With its state-of-the-art production lines, the company boasts module output of 5GW. Bloomberg has listed ZNShine as a global Tier 1 PV manufacturer and Top 4 reliable PV supplier.

ZXM6-NHLD144 Series Znshinesolar 9BB HALF-CELL Light-Weight Double Glass



## ELECTRICAL PROPERTIES | STC\*

Module Type	ZXM6-NHLD144 -420/M	ZXM6-NHLD144 -425/M	ZXM6-NHLD144 -430/M	ZXM6-NHLD144 -435/M	ZXM6-NHLD144 -440/M	ZXM6-NHLD144 -445/M
Nominal Power Watt Pmax(W)	420	425	430	435	440	445
Power Output Tolerance Pmax(%)	0~+3	0~+3	0~+3	0~+3	0~+3	0~+3
Maximum Power Voltage Vmp(V)	40.2	40.4	40.6	40.8	41.0	41.2
Maximum Power Current Imp(A)	10.45	10.52	10.60	10.67	10.74	10.81
Open Circuit Voltage Voc(V)	48.7	48.9	49.1	49.3	49.5	49.7
Short Circuit Current Isc(A)	10.94	11.02	11.10	11.17	11.25	11.32
Module Efficiency (%)	19.32	19.55	19.78	20.01	20.24	20.47

\*STC (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, AM 1.5 \*The data above is for reference only and the actual data is in accordance with the pratical testing

### ELECTRICAL PROPETIES | NMOT\*

Maximum Power Pmax(Wp)	313.5	317.1	321.0	324.7	328.4	332.1
Maximum Power Voltage Vmpp(V)	37.7	37.8	38.0	38.2	38.3	38.5
Maximum Power Current Impp(A)	8.33	8.39	8.45	8.50	8.56	8.62
Open Circuit Voltage Voc(V)	45.4	45.6	45.8	46.0	46.2	46.2
Short Circuit Current Isc(A)	8.84	8.90	8.96	9.02	9.09	9.14

\*NMOT(Nominal module operating temperature):Irradiance 800W/m<sup>2</sup>,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s \*The data above is for reference only and the actual data is in accordance with the pratical testing

### **TEMPERATURE RATINGS**

## **MECHANICAL DATA**

NMOT	44℃ ±2℃
Temperature coefficient of Pmax	-0.36%/°C
Temperature coefficient of Voc	-0.29%/°C
Temperature coefficient of lsc	0.05%/°C
*Do not connect Fuse in Combiner Box with two or n	nore strings in parallel connection

### WORKING CONDITIONS

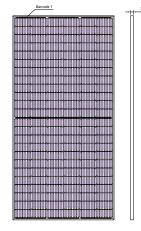
Maximum system voltage	1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	20 A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

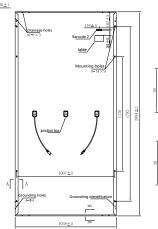
Solar cells	Mono 166×83mm
Cells orientation	144 (6×24)
Module dimension	2094×1038×30 mm(With Frame)
Weight	28 kg
Glass	2.0mm+2.0mm heat strengthened glass
Junction box	IP 68, 3 diodes
Cables	4 mm² ,350 mm
Connectors	MC4-compatible

# PACKAGING INFORMATION

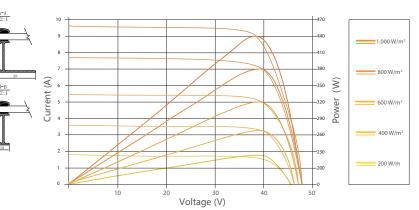
Packing Type	40' HQ
Piece/Box	36
Piece/Container	792

# DIMENSION OF THE PV MODULE (mm)





### I-V CURVES OF THE PV MODULE



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