

Photovoltaic Module Monocrystalline 144

KEY FEATURES



High module efficiency through superior manufacturing technology



Due to the use of multi-busbar solar cells, the temperature coefficient has been improved, resulting in no power loss.



Strictly control the micro-crack of solar cells and the other non visible defect of internal modules



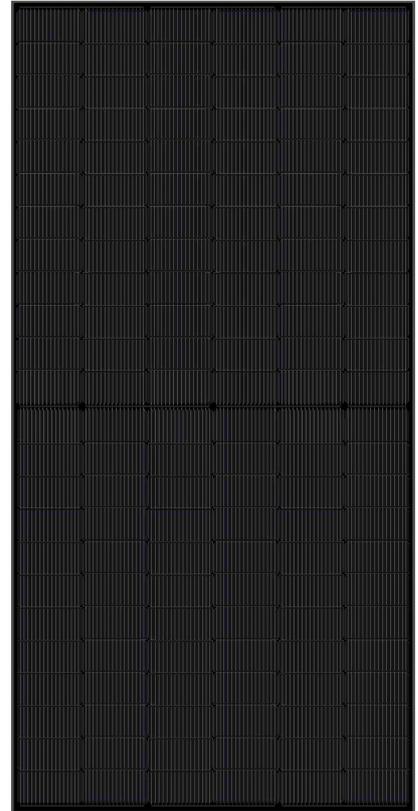
Module can bear snow loads up to 5400Pa and wind loads up to 2400Pa



Manufactured according to and certified international I Quality and Environment Management System



Using advanced low reflection and high light transmission glass and cell sheet surface cutting technology, in the weak light environment can also play a good performance.



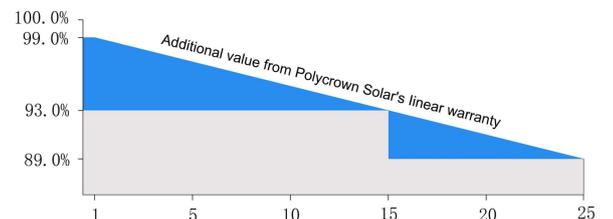
Certificates

- IEC61215, IEC61730, CQC, CE, TUV
- ISO9001:2015
- ISO14001:2015
- ISO45001:2018



Warranties

- 15 years product warranty
- 25 years power warranty



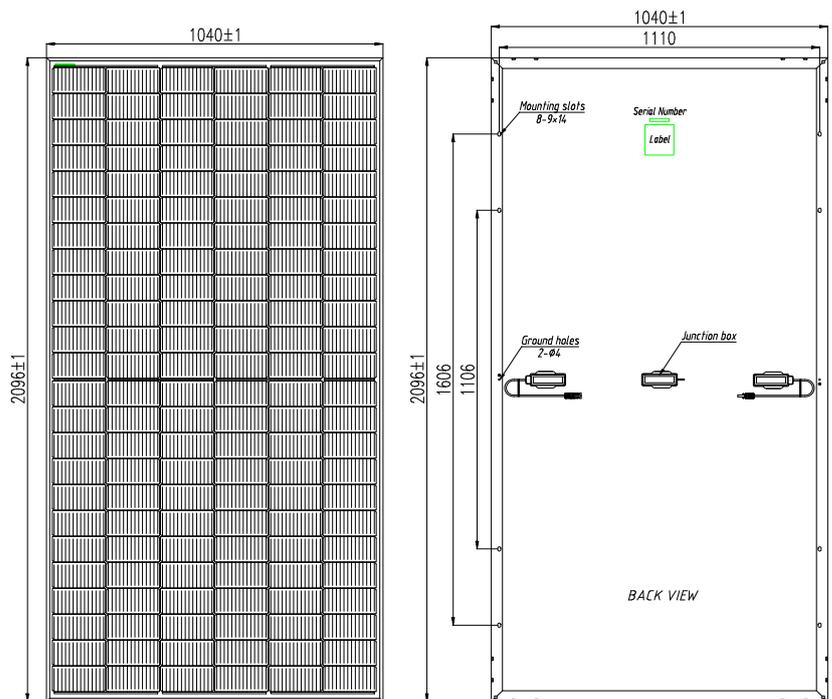
Electrical Characteristics

Model	NS-430MH-144	NS-440MH-144	NS-450MH-144	NS-460MH-144
Maximum Power at STC(Pmax)	430W	440W	450W	460W
Optimum Operating Voltage (Vmp)	41.11V	41.51V	41.91V	42.31V
Optimum Operating Current (Imp)	10.46A	10.60A	10.74A	10.88A
Open-Circuit Voltage (Voc)	48.78V	49.18V	49.58V	49.98V
Short-Circuit Current (Isc)	11.30A	11.47A	11.63A	11.79A
Solar Cell Efficiency (%)	21.99	22.17	23.02	23.53
Solar Module Efficiency (%)	19.72	20.18	20.64	21.10
Operating Temperature	-40to85℃			
Maximum System Voltage	DC1500V			
Maximum Series Fuse Rating	20A			
Power Tolerance	0~+3%			
STC:Irradiance 1000W/m ² ,Modules Temperature 25℃,AM=1.5				

Temperature Coefficient

NOCT	45℃ ± 2℃
Temperature Coefficient of Pmax	-0.29%/℃
Temperature Coefficient of VOC	-0.25%/℃
Temperature Coefficient of ISC	0.045%/℃

Engineering Drawings



Mechanical Characteristics

No. of cells	144(6×12+6×12)
Dimensions	2096mm*1040mm*30mm
Weight	24kg ±3%
Front glass	3.2mm tempered glass
Frame	Anodized aluminium alloy
Junction box	IP68, three diodes
Connector	Plug and socket
Output cables	PV 4.0mm ²
1*40'HQ	37pcs/Pallet,814pcs/ 40'HQ;

IV-Curves

