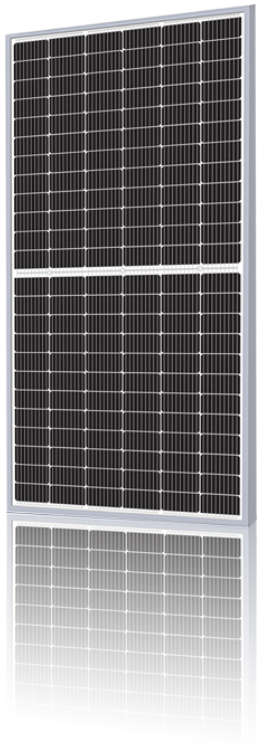
POWER SOLID



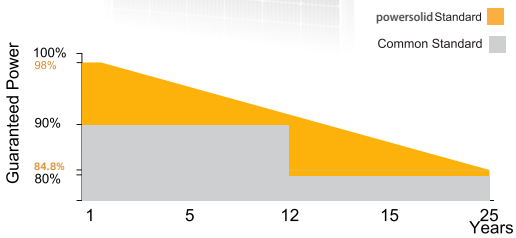
455W Solar Panel

PS455W#PVPS

9BB HALF-CELL Monocrystalline PERC PV Module

21.16%
MAXIMUM EFFICIENCY

0.55%
YEARLY DEGRADATION



*Please check the valid version of Limited Product Warranty which is officially released by power solid

IEC 61215/IEC 61730/IEC 61701/IEC 62716/UL6 1730

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

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.

Excellent Cells Efficiency

9BB 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.

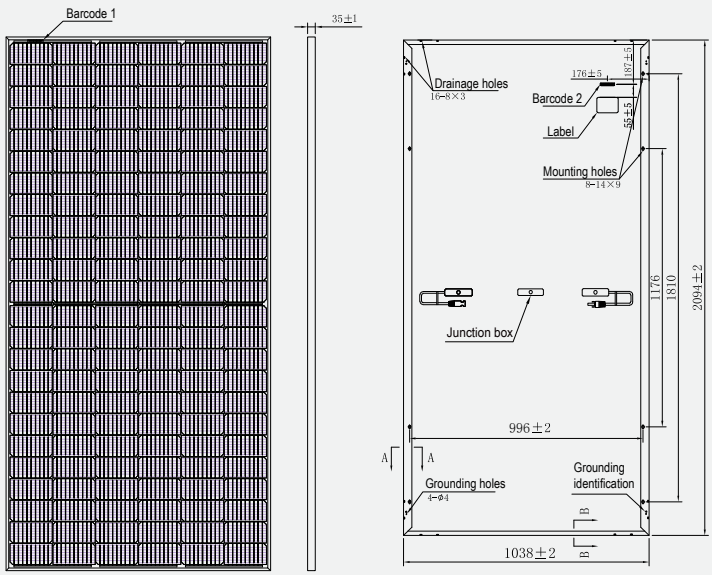
TIER 1

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

POWER SOLID

PS455W#PVPS

DIMENSIONS OF PV MODULE(mm)

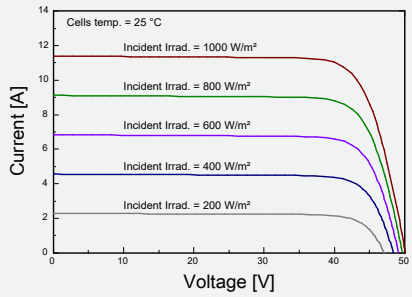


Front View

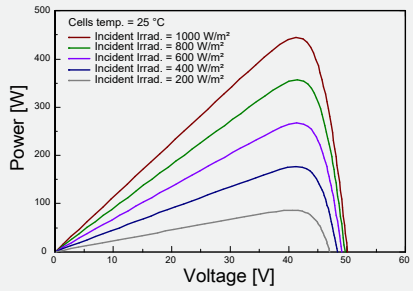
Back View

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

I-V CURVES OF PV MODULE(445W)



P-V CURVES OF PV MODULE(445W)



ELECTRICAL CHARACTERISTICS | STC*

Nominal Power Watt Pmax(W)*	455
Maximum Power Voltage Vmp(V)	41.60
Maximum Power Current Imp(A)	10.94
Open Circuit Voltage Voc(V)	50.50
Short Circuit Current Isc(A)	11.53
Module Efficiency (%)	20.93

*The data above is for reference only and the actual data is in accordance with the pratical testing
*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25±2℃, AM 1.5
*Measuring uncertainty: ±3%, all the electrical characteristics such as Power, Im, Vm and FF are within ±3% tolerance.

MECHANICAL DATA

Solar cells	Mono PERC
Cells orientation	144 (6×24)
Module dimension	2094×1038×35 mm (With Frame)
Weight	23.5 ±1.0 kg
Glass	3.2mm, High Transmission, AR Coated Tempered Glass
Junction box	IP 68, 3 diodes
Cables	4 mm² , 350 mm (With Connectors)
Connectors*	MC4-compatible

*Please refer to regional datasheet for specified connector

ELECTRICAL CHARACTERISTICS | NMOT

Maximum Power Pmax(Wp)	339.80
Maximum Power Voltage Vmpp(V)	38.80
Maximum Power Current Impp(A)	8.76
Open Circuit Voltage Voc(V)	47.10
Short Circuit Current Isc(A)	9.31

*NMOT:Irradiance 800W/m²,Ambient Temperature 20℃,AM 1.5,Wind Speed 1m/s

TEMPERATURE RATINGS

NMOT	44℃ ±2℃
Temperature coefficient of Pmax	-0.36%/℃
Temperature coefficient of Voc	-0.29%/℃
Temperature coefficient of Isc	0.05%/℃

WORKING CONDITIONS

Maximum system voltage	1500 V DC
Operating temperature	-40℃~+85℃
Maximum series fuse	20 A
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. 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.