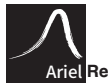


S465N60BPV S470N60BPV S475N60BPV S480N60BPV

Shinson is a leading professional supplier in the renewable energy industry, specializing in the production and distribution of high-quality PV modules, completed PV kits, and energy storage solutions. With a commitment to sustainable energy solutions, we strive to provide innovative and reliable products to meet the growing global demand for clean and efficient power generation.

With a focus on quality, innovation, and customer satisfaction, we strive to empower individuals, businesses, and communities with reliable and sustainable energy solutions. By harnessing the power of the sun and embracing renewable energy, we are driving the transition towards a greener and more sustainable future.

S-Blade™ series of PV modules are designed for building integration, agriculture, solar fences and some other applications which request higher transparency modules.



High transparency , high efficiency

The optimized number and width of main gate lines, ensure the sunlight can go through and high efficiency of cells maximize the power generation.



Half-Cut Cell design

Half cut cell technology can reduce the internal power loss and improve the output power. Excellent heat dissipation avoids hot spot production



Longer life span with 30 years warranty

Shinson extended the warranty period up to 30 years for both performance and workmanship which is on top level of the industry for bifacial double glassed modules.



Lower power degradation with more generation

Ensured PID resistance through cell process and module material control to help harvest more, guaranteed only 0.4% annual power degradation .

S.blade[™]

BIPV Frameless

480W

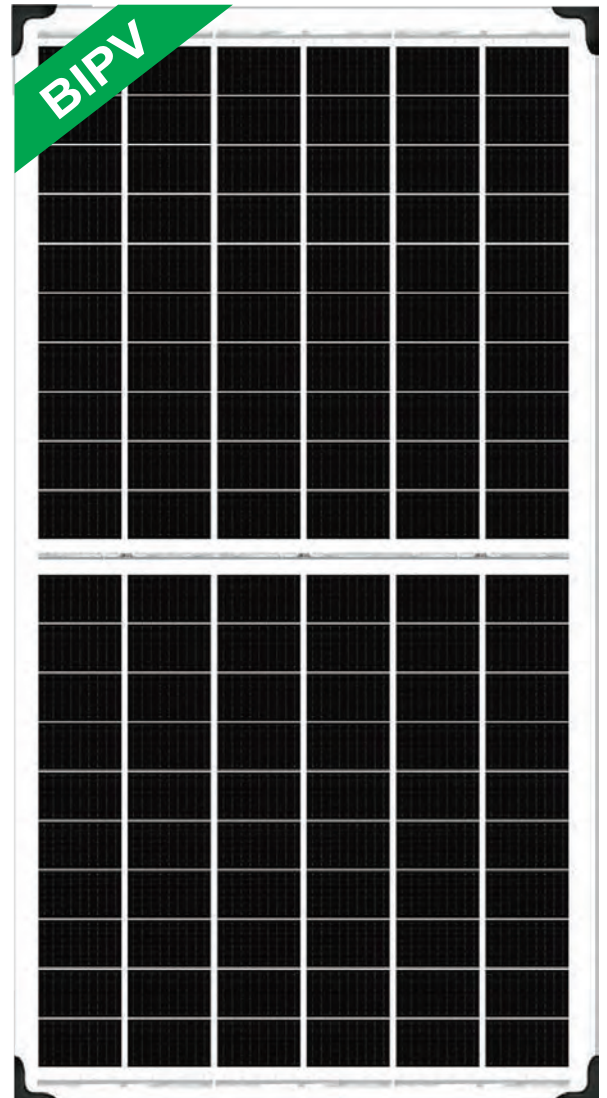
Maximum Output Power

120

TOPcon Bifacial Cells

22.24%

Max efficiency



Electrical Data (STC)

Part Number	S465N60BPV	S470N60BPV	S475N60BPV	S480N60BPV
Peak Power Watts- $P_{MAX}(Wp)^*$	465	470	475	480
Power Output Tolerance	0/+5W			
Open Circuit Voltage- $V_{oc}(V)$	42.22	42.38	42.54	42.71
Short Circuit Current- $I_{sc}(A)$	14.07	14.15	14.23	14.31
Maximum Power Voltage- $V_{MPP}(V)$	34.89	35.05	35.21	35.38
Maximum Power Current- $I_{MPP}(A)$	13.33	13.41	13.49	13.57
Panel Efficiency(%)	21.55	21.78	22.01	22.24

STC :Irradiance 1000w/m²,Cell Temperature 25°C *Mearsure tolerance:±3%

Electrical Data (NOCT)

MaximumPower- $P_{MAX}(Wp)^*$	350	353	357	361
Open Circuit Voltage- $V_{oc}(V)$	40.10	40.25	40.41	40.57
Short Circuit Current- $I_{sc}(A)$	11.36	11.42	11.49	11.55
Maximum Power Voltage- $V_{MPP}(V)$	32.77	32.94	33.10	33.27
Maximum Power Current- $I_{MPP}(A)$	10.67	10.73	10.79	10.85

NOCT:Irradiance at 800W/m²,Ambient Temperature 20°C,Wind Speed 1m/s

Mechanical Data

Panel Dimension(H/W/0)	1930x1136x6.5 mm
Weight	23.5kg
Cell Type	N-Topcon cells
Cell Size	182x91mm
Cell Number	120
Front/Back Glass	3.2 mm+2.0 mm tempered, Anti-reflection Coating
Encapsulant Type	POE
Frame Type	No Frame
Junction Box Protection Class	IP68 Rated
Connector Type	MC4 or MC 4 Compitable
Cable	1x4.0 mm ² ,(+)-1200 mm,(-)1200 mm or customized lenght

Temperature Ratings

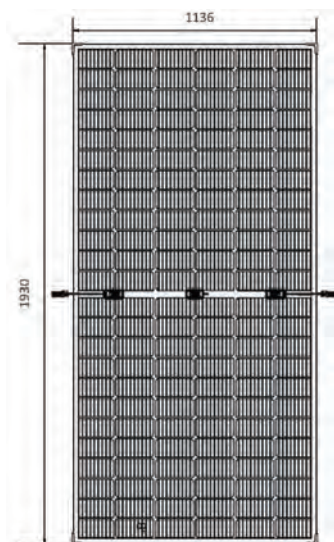
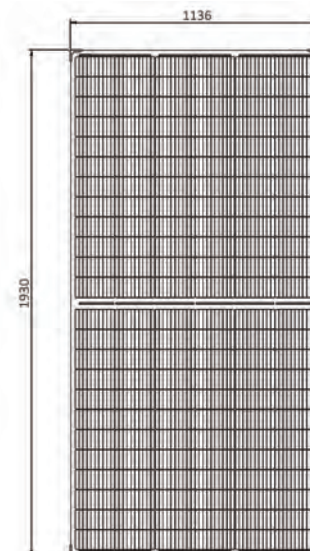
Nominal Operating Cell Temp.(NOCT)	45°C(±2°C)
Temperature Coefficient of P_{MAX}	-0.300%/°C
Temperature Coefficient of V_{oc}	-0.250%/°C
Temperature Coefficient of I_{sc}	+0.046%/°C

* Do not connect Fuse in Combiner Box with two or more strings in parallel connection

Packaging Configuration

Modules per box	33 pieces
Modules per 40'container	594 pieces

Dimensions of PV Module(mm)



Maximum Ratings

Operational Temperature	-40~±85 °C
Front/Rear Side Load	5400/2400pa
Max Series Fuse Rating	20A
Max System Voltage	1500V (IEC)
Fire Rating	Class A

Warranty

Product Workmanship Warranty	30 years
Output Power Warranty	30 years

