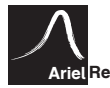


S415M44SBB S420M44SBB S425M44SBB S430M44SBB

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-Nano™ series of PV modules are designed for residential and small commercial installations with compact sizes and aesthetic appearances.



Roofing Aesthetics

S-Nano™ series has been designed with aesthetic in mind, the ultra black color looks well integrated to roofing ,creates on modern and improved aesthetic.



Advanced Shingled cell technology with better performance

Built with latest shingled technology with high efficiency of PREC solar cells, better performance under the shadow, lower hotpot risk.



Longer life span with 25 years warranty

Built with high reliable raw-materials, shinson extended the warranty period up to 25 years for both performance and workmanship which is on top level of the industry for backsheet modules.



Lower power degradation with more generation

Ensured PID resistance through cell process and module material control to help harvest more, guaranteed only 0.5% annual power degradation .

S.NANO™
Solar Modules
Shingled / Ultra black

Shingled
Module Technology



Electrical Data (STC)

Part Number	S415M44SBB	S420M44SBB	S425M44SBB	S430M44SBB
Peak Power Watts-P _{MAX} (Wp)*	415	420	425	430
Power Output Tolerance	0/+5W			
Open Circuit Voltage-V _{oc} (V)	41.50	41.60	41.70	41.80
Short Circuit Current-I _{sc} (A)	12.80	12.92	13.03	13.05
Maximum Power Voltage-V _{MPP} (V)	34.40	34.50	34.60	34.70
Maximum Power Current-I _{MPP} (A)	12.08	12.19	12.30	12.40
Panel Efficiency(%)	20.90	21.10	21.40	21.70

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

Electrical Data (NOCT)

MaximumPower-P _{MAX} (Wp)*	312	316	320	324
Open Circuit Voltage-V _{oc} (V)	39.60	39.70	39.80	39.80
Short Circuit Current-I _{sc} (A)	10.31	10.41	10.50	10.51
Maximum Power Voltage-V _{MPP} (V)	32.80	32.90	33.00	33.10
Maximum Power Current-I _{MPP} (A)	9.53	9.62	9.70	9.79

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

Mechanical Data

Panel Dimension(H/W/0)	1812×1096×30mm
Weight	20.8kg
Cell Type	Mono-crystalline solar cell
Cell Orientation	305(61*5)
Front glass	tempered glass, 3.2mm
Frame	Anodized aluminum profile
Junction Box	IP68, two diodes
Cable	4mm², +300mm/-1000mm(Vertical), +220mm/-180mm(Horizontal)

Temperature Ratings

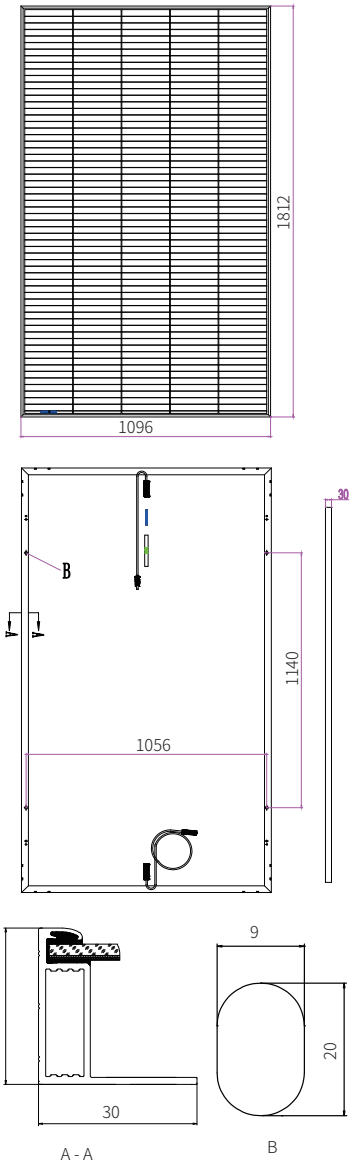
Nominal Operating Cell Temp.(NOCT)	42.30°C(±2°C)
Temperature Coefficient of P _{MAX}	-0.34%/°C
Temperature Coefficient of V _{oc}	-0.27%/°C
Temperature Coefficient of I _{sc}	+0.04%/°C

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

Packaging Configuration

Modules per box	36 pieces
Modules per 40'container	924 pieces

Dimensions of PV Module(mm)



Maximum Ratings

Operational Temperature	-40~±85 °C
Front/Rear Side Load	5400/2400pa
Max Series Fuse Rating	25A
Max System Voltage	1500V (IEC)
Fire Rating	Class 1(UN19177)

Warranty

Product Workmanship Warranty	25 years
Output Power Warranty	25 years

