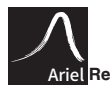


S580M72NT3BF S585M72NT3BF S590M72NT3BF S595M72NT3BF

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-Max™ series of PV modules are designed for commercial projects and large solar farms with highest power output for saving more than 15% of BOS.



High power with high efficiency bifacial solar cells

High power output design to save BOS(balance of system) cost, less payback time.



High reliability with top quality raw materials

Built with top qualified and certified materials to ensure the performance during long working period and working in tough conditions



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 backsheet modules.



Lower power degradation with more generation

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

S.max[™] Solar Modules

N-TOPcon

590W

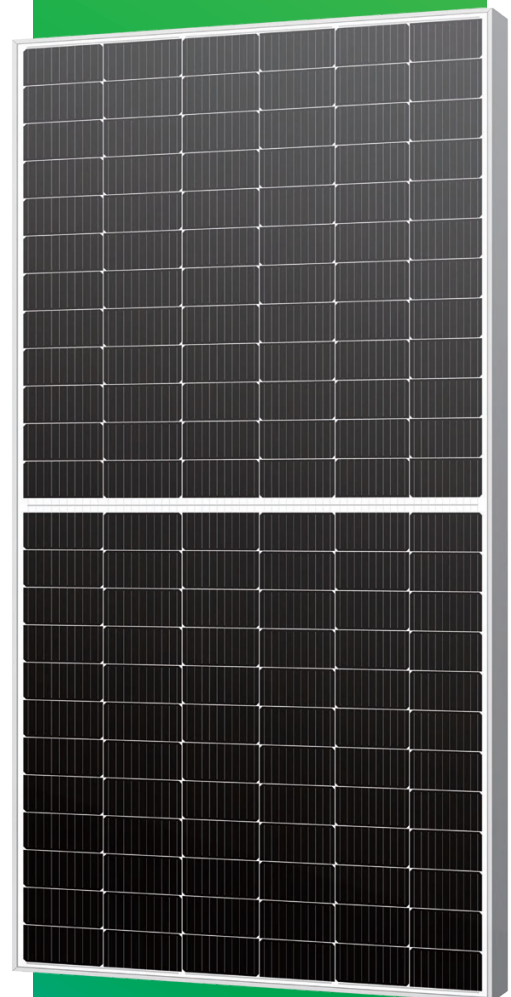
Maximum Output Power

144

Bifacial Cells

10~30%

Extra Backside Gains



Electrical Data (STC)

Part Number	S580M72NT3BF	S585M72NT3BF	S590M72NT3BF	S595M72NT3BF
Peak Power Watts- $P_{MAX}(Wp)^*$	580	585	590	595
Power Output Tolerance	0/+5W			
Open Circuit Voltage- $V_{oc}(V)$	51.43	51.63	51.83	52.03
Short Circuit Current- $I_{sc}(A)$	14.30	14.36	14.42	14.48
Maximum Power Voltage- $V_{MPP}(V)$	42.84	43.02	43.17	43.34
Maximum Power Current- $I_{MPP}(A)$	13.54	13.60	13.67	13.73
Panel Efficiency(%)	22.45	22.45	22.84	23.03

STC :Irradiance 1000w/m²,Cell Temperature 25°C, Binning Tolerance:±5W

Electrical Data (NOCT)

MaximumPower- $P_{MAX}(Wp)^*$	439	442	446	450
Open Circuit Voltage- $V_{oc}(V)$	49.02	49.21	49.40	49.59
Short Circuit Current- $I_{sc}(A)$	11.54	11.58	11.63	11.68
Maximum Power Voltage- $V_{MPP}(V)$	40.25	40.40	40.53	40.67
Maximum Power Current- $I_{MPP}(A)$	10.89	10.95	11.00	11.06

STC :Irradiance 1000w/m²,Cell Temperature 25°C, Binning Tolerance:±5W

Mechanical Data

Panel Dimension(H/W/0)	2278x1134x30mm
Weight	32kg
Cell Type	N-Topcon cells
Cell Number	144
Front Glass	2.0mm AR coating tempered glass
Back Glass	2.0mm Glazed Glass
Frame Type	Anodized Aluminium Alloy
Junction Box Protection Class	IP 68
Cables	4mm ² cable 35cm (Including MC4 connector)

Temperature Ratings

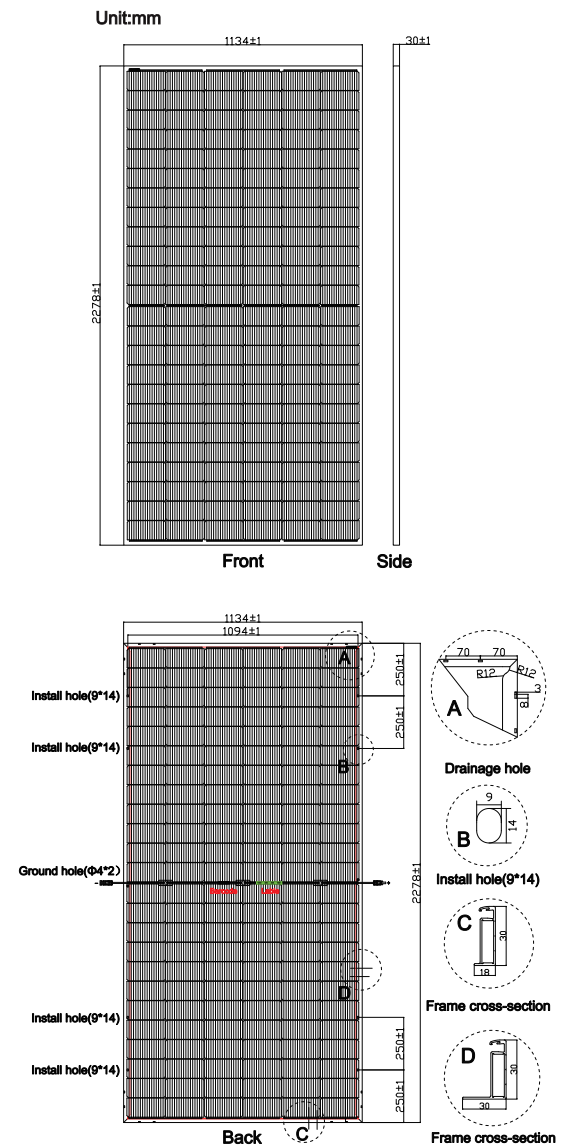
Nominal Operating Cell Temp.(NOCT)	45°C(±2°C)
Temperature Coefficient of P_{MAX}	-0.290%/°C
Temperature Coefficient of V_{oc}	-0.250%/°C
Temperature Coefficient of I_{sc}	+0.041%/°C

* 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	720 pieces

Dimensions of PV Module(mm)



Maximum Ratings

Operational Temperature	-40~±85 °C
Front/Rear Side Load	5400/2400pa
Max Series Fuse Rating	30A
Max System Voltage	1500V (IEC)
Fire Rating	Class A

Warranty

Product Workmanship Warranty	30 years
Output Power Warranty	30 years

