



46
Series
**SHINGLED
MODULE**

420-445 w

ReX Series: SNX-E46SP

21.4% Maximum Efficiency **0-+5w** Positive Power Tolerance **20 years** Product Warranty



HIGHER VALUE

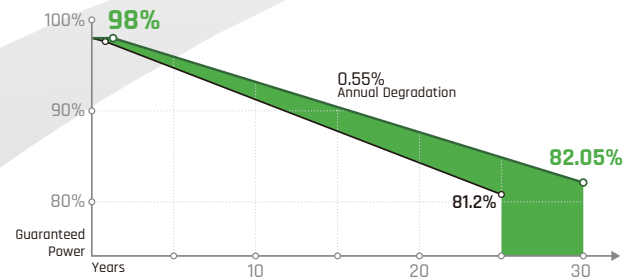
- ✦ Longer Warranty terms and lower power degradation
- ✦ Lower LCOE for shorter payback period

HIGHER PERFORMANCE

- ✦ Module Power reaches up to 425W by unique design of module
- ✦ Better Anti-shading performance by shingled cell structure
- ✦ Lower LID by lower string current

MORE RELIABLE

- ✦ Excellent anti-PID performance
- ✦ Lower hot spot risks
- ✦ Lower Pmax temperature coefficient
- ✦ Mechanical loading capability up to 5400Pa



Sonnex Shingled Module Performance Warranty

Warranty

20 years product workmanship warranty. 30 years linear power output warranty. The power degradation for the first year will be less than 2%. From the 2nd year and onwards, the annual degradation will be less than 0.55%. Guaranteed performance ratio of 82.05% after 30 years.

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420-445W

SHINGLED MODULE 46 Series
SNX-E46SP

Electrical Characteristics at Standard Test Conditions(STC)

Module Type: SNX-E46SP-***M	420	425	430	435	440	445
Maximum Power-Pm [W]	420	425	430	435	440	445
Open Circuit Voltage-Voc [V]	43.3	43.4	43.5	43.6	43.7	43.8
Short Circuit Current-Isc [A]	12.46	12.56	12.68	12.79	12.90	13.01
Maximum Power Voltage-Vm [V]	35.9	36.0	36.1	36.2	36.3	36.4
Maximum Power Current-Im [A]	11.71	11.81	11.92	12.02	12.13	12.23
Module Efficiency-η [%]	20.2	20.4	20.7	20.9	21.1	21.4

Electrical Characteristics at NMOT

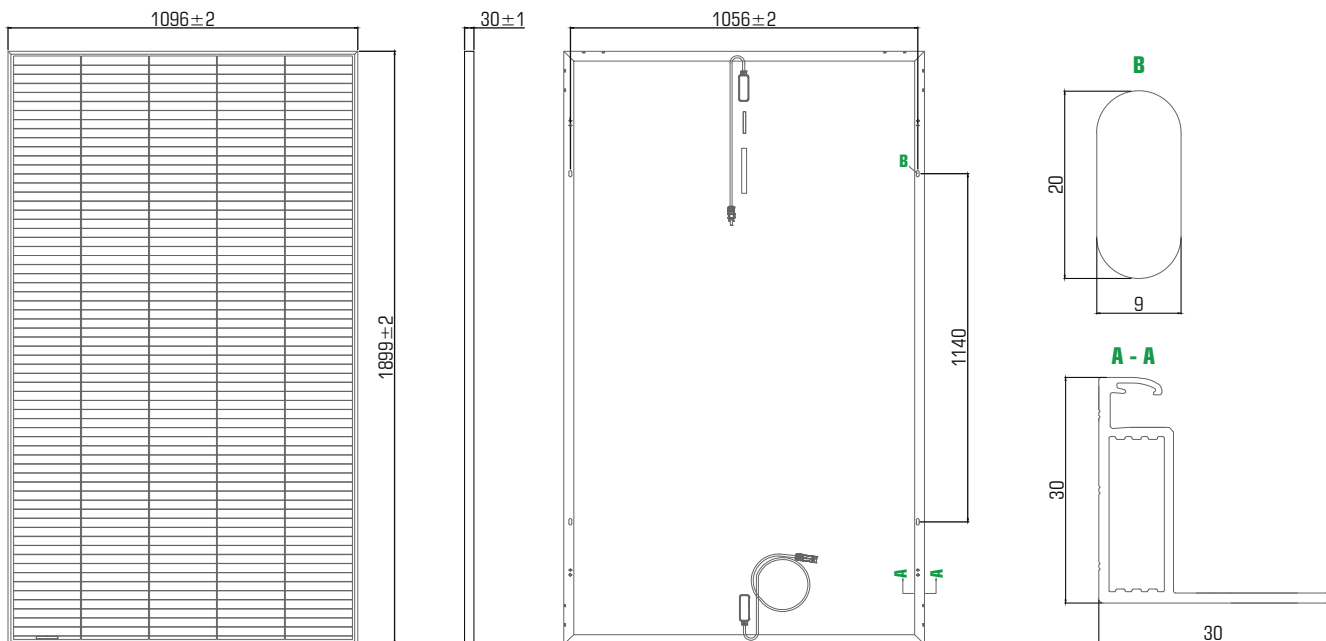
Maximum Power-Pm [W]	316	320	324	328	331	335
Open Circuit Voltage-Voc [V]	41.3	41.4	41.5	41.6	41.7	41.8
Short Circuit Current-Isc [A]	10.05	10.14	10.23	10.32	10.41	10.50
Maximum Power Voltage-Vm [V]	34.2	34.3	34.4	34.5	34.6	34.7
Maximum Power Current-Im [A]	9.24	9.32	9.41	9.49	9.57	9.66

Note: 1. Standard Test Conditions (STC): Irradiance 1000 W/m²; AM 1.5; Ambient temperature 25°C ;
2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m²; wind speed 1m/s; ambient temperature 20°C.
3. Tolerance of Pm: 0-+5W, Measuring uncertainty of power: +3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: +3%.

Mechanical Characteristics

Dimensions	1899×1096×30 mm
Weight	21.8kg
Front Glass	AR coating tempered glass, 3.2mm
Frame	Anodized aluminum alloy
Cells	Mono-crystalline solar cell 210mm
Cell Orientation	320 (64×5)
Junction Box	IP68
Cable/Connectors	4mm ² , +300mm/-1000mm(Vertical), +220mm/-180mm(Horizontal), EV02

Drawing



Temperature Characteristics

NMOT	42.3 °C(±2°C)
Temperature Coefficient of Voc	-0.27% /°C
Temperature Coefficient of Isc	0.04% /°C
Temperature Coefficient of Pm	-0.34% /°C

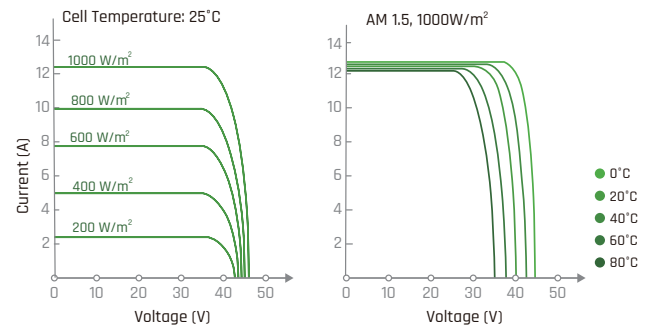
Maximum Ratings

Maximum System Voltage [V]	DC 1500/1000(IEC)
Series Fuse Rating [A]	20
Maximum Surface Load Capacity [Pa]	5,400
Temperature Range [°C]	- 40 to + 85
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m·s ⁻¹

Other Characteristics

Packaging 36 pcs/pallet, 864 pcs/40' HQ container

I-V curve



Declaration: Along with the technical improvement and product update, deviation between the technical parameter and Sonnex future products might occur. Specifications included in this datasheet are subject to change without prior notice. Sonnex reserves the right of final interpretation.