

**44**  
Series  
**SHINGLED  
MODULE**

**405 - 425 w**

ReX Series: SNX-E44SP

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



**HIGHER VALUE**

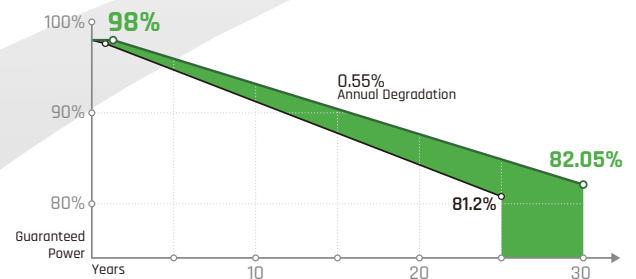
- ✦ Longer Warranty terms and lower power degradation
- ✦ Lower LCOE for shorter payback period

**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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# 405-425W SHINGLED MODULE 44 Series

## SNX-E44SP

### Electrical Characteristics at Standard Test Conditions(STC)

Module Type: SNX-E44SP-****M	405	410	415	420	425
Maximum Power-Pm [W]	405	410	415	420	425
Open Circuit Voltage-Voc [V]	41.3	41.4	41.5	41.6	41.7
Short Circuit Current-Isc [A]	12.53	12.65	12.80	12.92	13.03
Maximum Power Voltage-Vm [V]	34.3	34.4	34.4	34.5	34.6
Maximum Power Current-Im [A]	11.86	11.97	12.08	12.19	12.30
Module Efficiency-η [%]	20.4	20.6	20.9	21.1	21.4

### Electrical Characteristics at NMOT

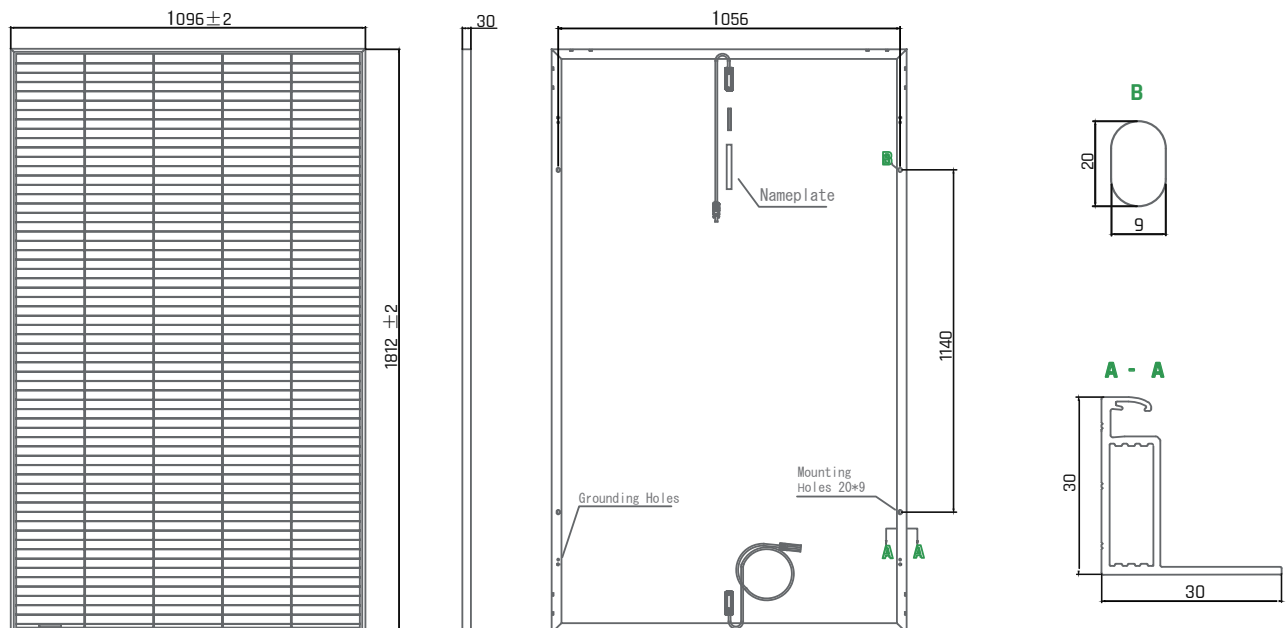
Maximum Power-Pm [W]	305	309	312	316	320
Open Circuit Voltage-Voc [V]	39.4	39.5	39.6	39.7	39.8
Short Circuit Current-Isc [A]	10.09	10.19	10.31	10.41	10.50
Maximum Power Voltage-Vm [V]	32.7	32.8	32.8	32.9	33.0
Maximum Power Current-Im [A]	9.33	9.41	9.53	9.62	9.70

Note: 1. Standard Test Conditions (STC): Irradiance 1000 W/m<sup>2</sup>; AM 1.5; Ambient temperature 25°C ;  
 2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m<sup>2</sup>; 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	1812×1096×30 mm
Weight	20.8kg
Front Glass	AR coating tempered glass, 3.2mm
Frame	Anodized aluminum alloy
Cells	Mono-crystalline solar cell 210mm
Cell Orientation	305 (61×5)
Junction Box	IP68
Cable/Connectors	4mm <sup>2</sup> ,1000mm / Stäubli 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

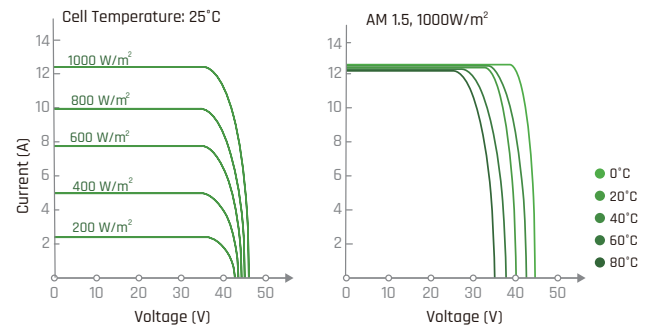
### Maximum Ratings

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 <sup>-1</sup>

### Other Characteristics

Packaging 36 pcs/pallet, 924 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.