

54 Series TOPCon Dual Glass Bifacial Module

415-435w

NeX Series: SNX-D54HND

22.30%

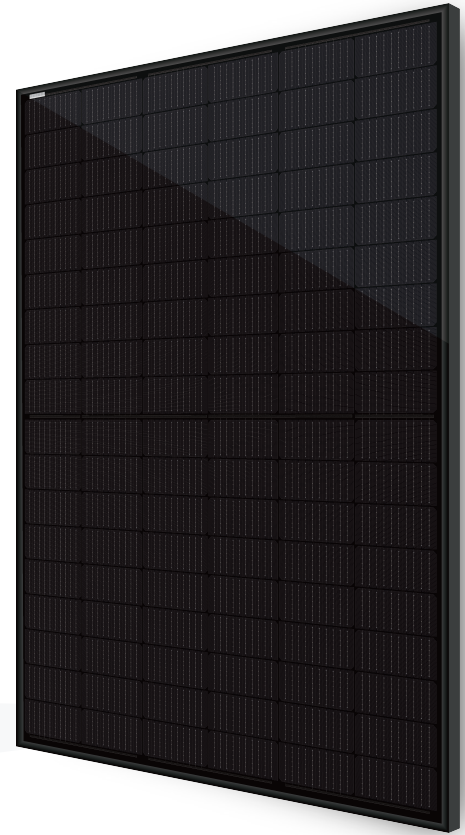
Maximum Efficiency

0~+5w

Positive Power Tolerance

30 years

Product Warranty



HIGHER VALUE

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

HIGHER PERFORMANCE

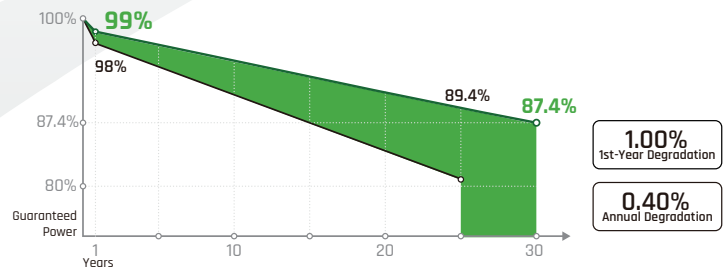
- ✦ Module Power reaches up to 435W with TOPCon cells
- ✦ Lower resistance performance by half-cell structure
- ✦ ZERO LID with additional power generation

MORE RELIABLE

- ✦ Excellent anti-PID performance
- ✦ Lower hot spot risks
- ✦ Better temperature coefficient
- ✦ Mechanical loading 5400Pa snow load and 2400Pa wind load



IEC61215(2016), IEC61730(2016)
ISO9001:2015: Quality management systems
ISO14001:2015: Environmental management



Sonnex TOPCon Module Performance Warranty

Warranty

30 years product workmanship warranty. 30 years linear power output warranty. The power degradation for the first year will be less than 1%. From the 2nd year and onwards, the annual degradation will be less than 0.4%. Guaranteed performance ratio of 87.4% after 30 years.

Sonnex Energie GmbH

Add: Gebäude 571, Cargo City Süd, 60549 Frankfurt am Main, Germany
www.sonnexenergie.com info@sonnexenergie.de

415-435W TOPCon DUAL GLASS MODULE 54 Series

SNX-D54HND

Electrical Characteristics at Standard Test Conditions(STC)

Module Type: SNX-D54HND-***M	415	420	425	430	435
Maximum Power-Pm [W]	415	420	425	430	435
Open Circuit Voltage-Voc [V]	38.00	38.10	38.20	38.30	38.40
Short Circuit Current-Isc [A]	13.99	14.07	14.15	14.23	14.31
Maximum Power Voltage-Vm [V]	31.30	31.50	31.70	31.90	32.05
Maximum Power Current-Im [A]	13.26	13.34	13.42	13.50	13.58
Module Efficiency-η [%]	21.25	21.51	21.76	22.02	22.28

Bifacial Output - Backside Power Gain Reference to 425W Front

Power Gains	5%	10%	15%	20%	25%
Maximum Power-Pm [W]	446	468	489	510	531
Open Circuit Voltage-Voc [V]	38.20	38.20	38.20	38.20	38.20
Short Circuit Current-Isc [A]	14.86	15.57	16.27	16.98	17.69
Maximum Power Voltage-Vm [V]	31.65	31.65	31.65	31.65	31.65
Maximum Power Current-Im [A]	14.09	14.79	15.45	16.11	16.78

Note: 1. STC: Irradiance 1000 W/m², AM 1.5, 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	1722×1134×30 mm
Weight	24.2Kg
Front Glass	AR coating tempered glass 2.0/Heat strengthened glass
Frame	2.0mm Anodized aluminum alloy, black
Cells	TOPCon solar cell 182mm*91mm
Cell Orientation	108 (6×18)
Junction Box	IP68
Cable/Connectors	4mm ² / MC4 or EV02

Temperature Characteristics

NMOT	42 °C (±2°C)
Temperature Coefficient of Voc	-0.260% /°C
Temperature Coefficient of Isc	0.046% /°C
Temperature Coefficient of Pm	-0.320% /°C

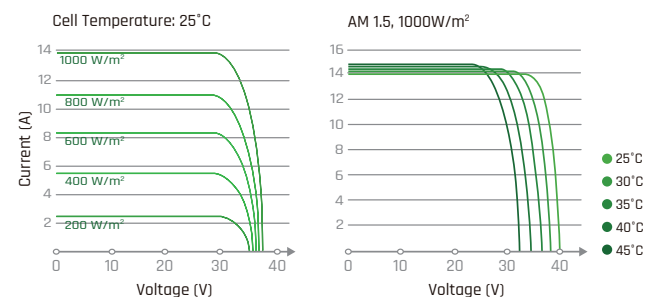
Maximum Ratings

Maximum System Voltage [V]	DC 1500/1000(IEC)
Series Fuse Rating [A]	25
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; 936 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.

Drawing

