ENERGIE Sonnex

Brigthen the future

54 Series TOPCon Dual Glass Bifacial Module

415 - 435 w

NeX Series: SNX-D54HND

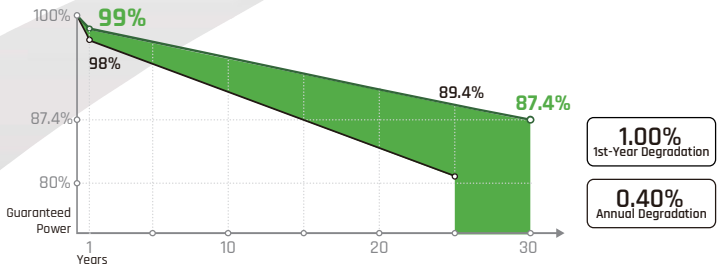
22.30%	0~+5w	30years
Maximum Efficiency	Positive Power Tolerance	Product Warranty

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



Sonnex TOPCon Module Performance Warranty

MORE RELIABLE

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

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 HALF-CELL MODULE 54 Series
SNX-D54HND

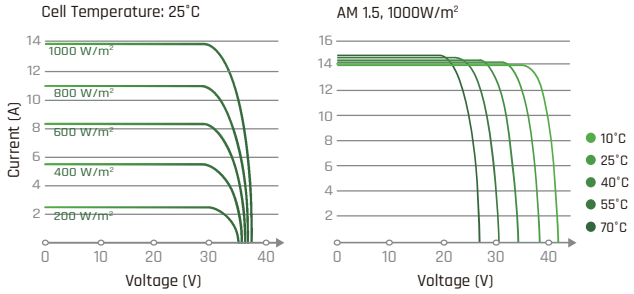
Electrical Characteristics at Standard Test Conditions(STC)					
Module Type: SNX-D54HND-***M	415	420	425	430	435
Maximum Power-Pm [W]	415	420	425	430	435
Open Circuit Voltage-Voc [V]	38.00	38.10	38.20	38.30	38.40
Short Circuit Current-Isc [A]	13.99	14.07	14.15	14.23	14.31
Maximum Power Voltage-Vm [V]	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
Electrical Characteristics at NMOT					
Maximum Power-Pm [W]	315	319	323	327	331
Open Circuit Voltage-Voc [V]	36.50	36.60	36.70	36.80	36.90
Short Circuit Current-Isc [A]	11.28	11.34	11.40	11.47	11.53
Maximum Power Voltage-Vm [V]	30.03	30.20	30.40	30.60	30.70
Maximum Power Current-Im [A]	10.49	10.56	10.63	10.69	10.78

Note: 1. Standard Test Conditions (STC): Irradiance 1000 W/m^2; AM 1.5; Ambient temperature 25°C ;
2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m^2; 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	25.4Kg
Front Glass	AR coating tempered glass, 2.0mm
Frame	Anodized aluminum alloy
Cells	TOPCon solar cell 182mm*91mm
Cell Orientation	108 (6×18)
Junction Box	IP68
Cable/Connectors	4mm^2 / MC4 or EVO2

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.

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