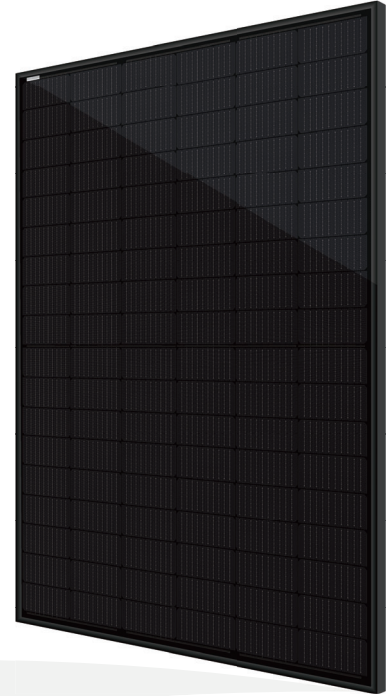




TOPCon Dual Glass Bifacial Module



425-445W

NEX Series: SNX-D54HNDxxxM(R1)

22.3% Maximum Efficiency **0~+5W** Positive Power Tolerance **30 years** Product Warranty

HIGH VALUE

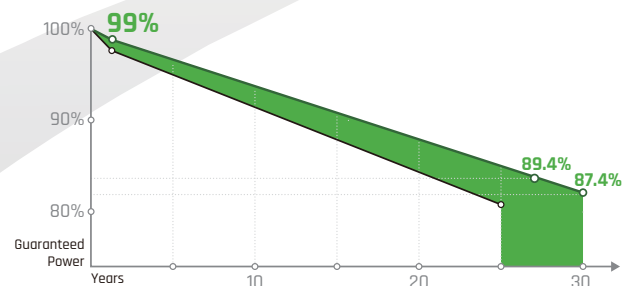
- Longer warranty terms and lower power degradation
- Lower LCOE for shorter payback period



IEC61215; IEC61730
IEC62716; IEC60068
ISO9001:2015: Quality management systems
ISO14001:2015: Environmental management

HIGHER PERFORMANCE

- Module power reaches up to 445W 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 1st year is less than 1%. From the 2nd year and onwards, the annual degradation is less than 0.4%. Guaranteed performance ratio is above 87.4% for the 30th year.

Sonnex Energie GmbH

425-445W TOPCon DUAL Glass MODULE

SNX-D54HND-xxxM(R1)

Electrical Characteristics - STC

Model: SNX-D54HND-xxxM	425	430	435	440	445
Maximum Power-Pm [W]	425	430	435	440	445
Maximum Power Voltage (Vmp/V)	32.18	32.38	32.59	32.81	33.04
Maximum Power Current (Imp/A)	13.21	13.28	13.35	13.41	13.47
Open Circuit Voltage (Voc/V)	38.75	38.95	39.16	39.38	39.61
Short Circuit Current (Isc/A)	13.66	13.73	13.80	13.86	13.92
Module Efficiency [%]	21.3	21.5	21.8	22.0	22.3

Electrical Characteristics - NMOT

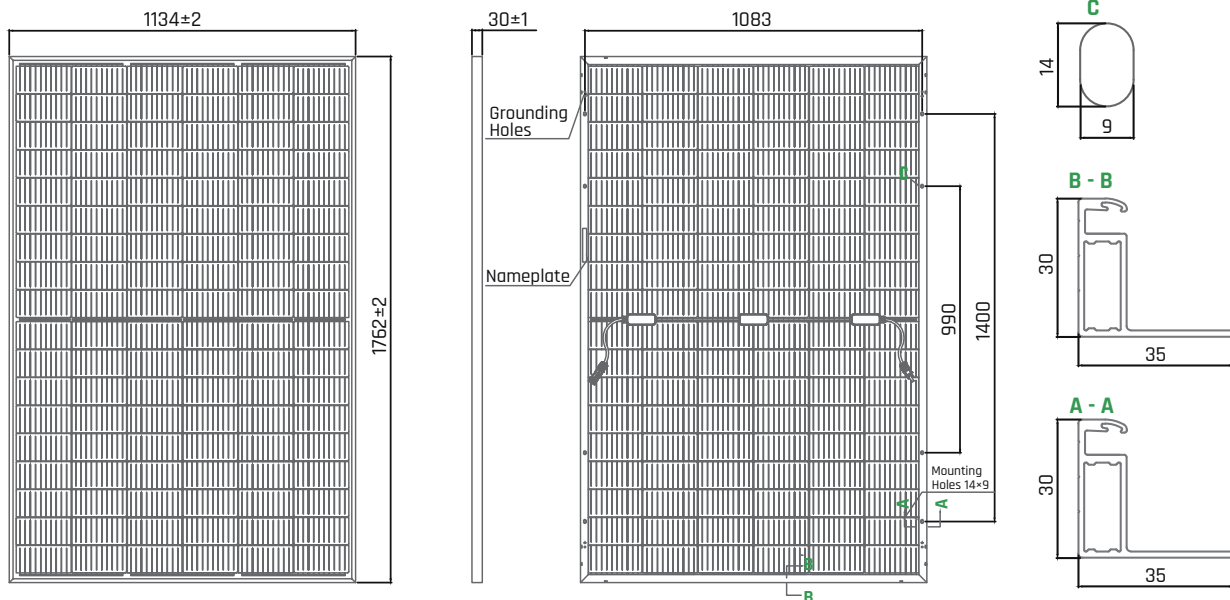
Maximum Power (Pmax/W)	325.6	329.3	333.2	337.0	340.9
Maximum Power Voltage (Vmp/V)	30.81	31	31.20	31.42	31.64
Maximum Power Current (Imp/V)	10.57	10.62	10.68	10.73	10.77
Open Circuit Current (Voc/V)	37.10	37.29	37.50	37.71	37.93
Short Circuit Current (Isc/A)	11.01	11.07	11.12	11.17	11.22

Note: 1. STC: Irradiance 1000 W/m², AM1.5, 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	1762×1134×30 mm
Weight	26 Kg
Front Glass	AR coating tempered glass 2.0mm
Fame	Anodized aluminum alloy, black
Cells	TOPCon cell 182.2 x 93mm
Cell Orientation	108 (6×18)
Junction Box	IP68
Cable/Connectors	4mm ² , /Stäubli MC4 or EV02

Drawing



Temperature Characteristics

NMOT	42°C (±2°C)
Temperature Coefficient of Voc	-0.25% /°C
Temperature Coefficient of Isc	0.045% /°C
Temperature Coefficient of Pm	-0.29% /°C

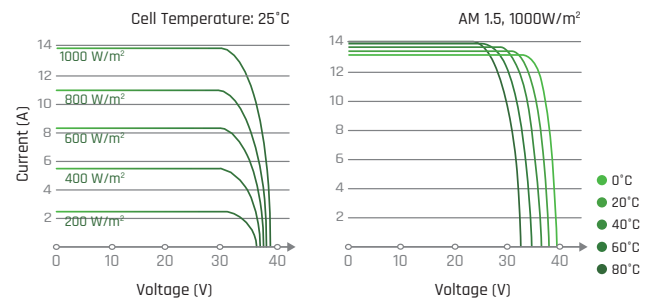
Maximum Ratings

Maximum System Voltage [V]	DC 1500(IEC)
Max.Fuse rating (A)	30
Maximum Surface Load Capacity (Pa)	5,400
Temperature Range [°C]	-40°C~+ 85°C
Withstanding hail	Maximum diameter of 25mm with impact speed of 23m/s

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.