

Product Information Sheet SNG 430-450 Watt TOPCon Technology

FLEX HC MONO 430-450 Watt

Highest quality with our cells
16 MBB TOPCon Technology

- | | |
|---|--|
| ✓ 30 years
Product Material & Workmanship | ✓ 30 years
Linear Performance Warranty |
| ✓ 1 %
1st-year Degradation | ✓ 0.4 %
Annual Degradation |

Quality and Safety

① Industry-leading power output warranty
25 years / 89.4 %
30 years / 87.4 %

30-year warranty on materials & workmanship

Fire Test: Class 1

- ✓ **Anti-PID Guarantee**
Minimizes the risk of degradation caused by PID phenomena by optimizing cell production technology and material control.
- ✓ **Multi-busbar Technology**
Higher performance, higher reliability, and greater (electrical) resilience.



On-grid residential roof-tops

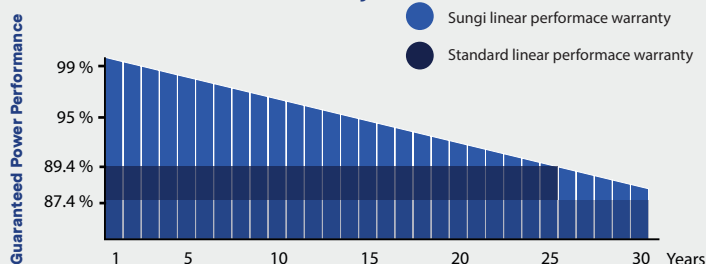


On-grid commercial Industrial roof-tops

Complete System and Product Certifications

IEC 61215 (2021), IEC 61730 (2023), IEC 61701, IEC 62716
ISO 9001:2015: Quality Management System
ISO 14001:2015: Environmental Management System
ISO 45001:2018: Occupational Health and Safety Management System
IEC 62941:2019: Quality System for PV Module Manufacturing

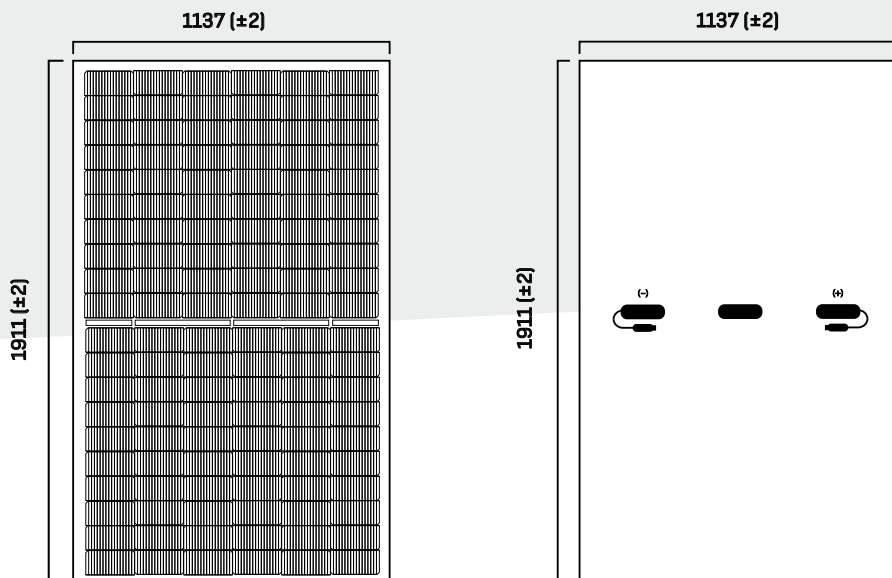
Premium Performance Warranty



20.7 %
Max Module Efficiency

30 Y Warranty
on materials & workmanship

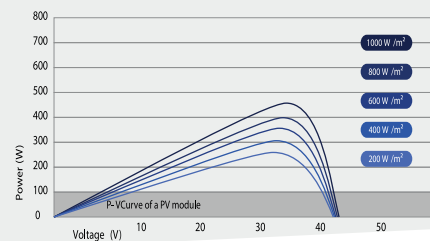
ENGINEERING DRAWINGS (mm)



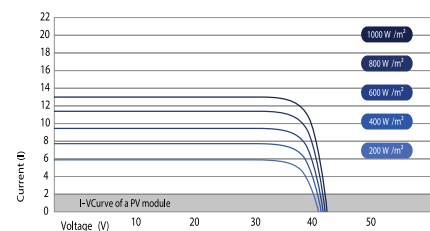
ELECTRICAL PERFORMANCE & TEMPERATURE

DEPENDENCE | SNG - 450

Power-Voltage Curves



Current-Voltage Curves



MODULE TYPE	SNG-430 W	SNG-435 W	SNG-440 W	SNG-445 W	SNG-450 W
Testing Conditions	STC ⁽²⁾ / NMOT ⁽³⁾	STC ⁽²⁾ / NMOT ⁽³⁾	STC ⁽²⁾ / NMOT ⁽³⁾	STC ⁽²⁾ / NMOT ⁽³⁾	STC ⁽²⁾ / NMOT ⁽³⁾
Maximum Power at STC (Pmax)	430 Wp	435 Wp	440 Wp	445 Wp	450 Wp
Maximum Power Voltage (Vmp)	34.18 V / 32.40 V	34.33V / 32.54 V	34.48 V / 32.68 V	34.63 V / 32.82 V	34.78 V / 32.96 V
Maximum Power Current (Imp)	12.30 A / 9.88 A	12.68 A / 9.96 A	12.77 A / 10.01 A	12.86 A / 10.09 A	12.95 A / 10.16 A
Open-Circuit Voltage (Voc)	41.43 V / 38.60 V	41.58 V / 38.75 V	41.73 V / 38.89 V	41.88 V / 39.03 V	42.03 V / 39.17 V
Short-Circuit Current (Isc)	13.62 A / 10.99 A	13.69 A / 11.05 A	13.76 A / 11.11 A	13.83 A / 11.16 A	13.90 A / 11.22 A
Module Efficiency (%)	19.79 %	20.02 %	20.25 %	20.48 %	20.71 %

ALL MODULES DATA

Operating Temperature (DC)	- 40 °C to + 85 °C
Maximum System Voltage	1500 VDC
Maximum Series Fuse Rating	20 A
Power Output Tolerance ⁽¹⁾	± 3 %
Temperature Coefficients of Pmax	- 0.35 % / °C
Temperature Coefficients of Voc	- 0.26 % / °C
Temperature Coefficients of Isc	+0.047 % / °C
Nominal Operating Cell Temperature (NOCT)	45 ± 2 °C

TECHNICAL SPECIFICATION

Cell type	TOPCon Technology (182x91 mm)
Number of cells	120 (2×60)
Dimensions	1911x1137x3.2* mm
Weight	9 kg
Front Sheet	ETFE
Junction Box	IP68 Rated
Output Cables	TUV 1x4.0 mm ² / UL 12 AWG*
Output Cables Length	1200 mm*
Connectors	MC 4

Testing Conditions
STC⁽²⁾/NMOT⁽³⁾

Irradiance
1000 W/m²
800 W/m²

Module Temperature
25 °C
20 °C

AM
1.5
Wind Speed 1m/s

Fire Rating
Class 1

⁽¹⁾ Measurement Tolerances : Pmax (± 3 %), Isc & Voc (± 3 %)

⁽²⁾ STC (Standard Testing Condition) : Irradiance : 1000 W/m², Cell Temperature: 25 °C, AM : 1.5

⁽³⁾ NMOT (Nominal Operating Module Temperature) : Irradiance : 800 W/m², NMOT Ambient Temperature: 20/25 °C, AM : 1.5, Wind Speed : 1 m/s

*or customized

Not applicable for installations in transition 5.0/ feed in tariff for italian market

Specifications included in this datasheet are subject to change without notice. SUNGI SOLAR reserves all the rights to final integrations.

PACKAGING CONFIGURATION



40' Container

- 68 pcs per pallet
- 24 pallets
- 1632 total pcs



20' Container

- 68 pcs per pallet
- 10 pallets
- 680 total pcs