SUNGi SOLAR

SNGFLEX

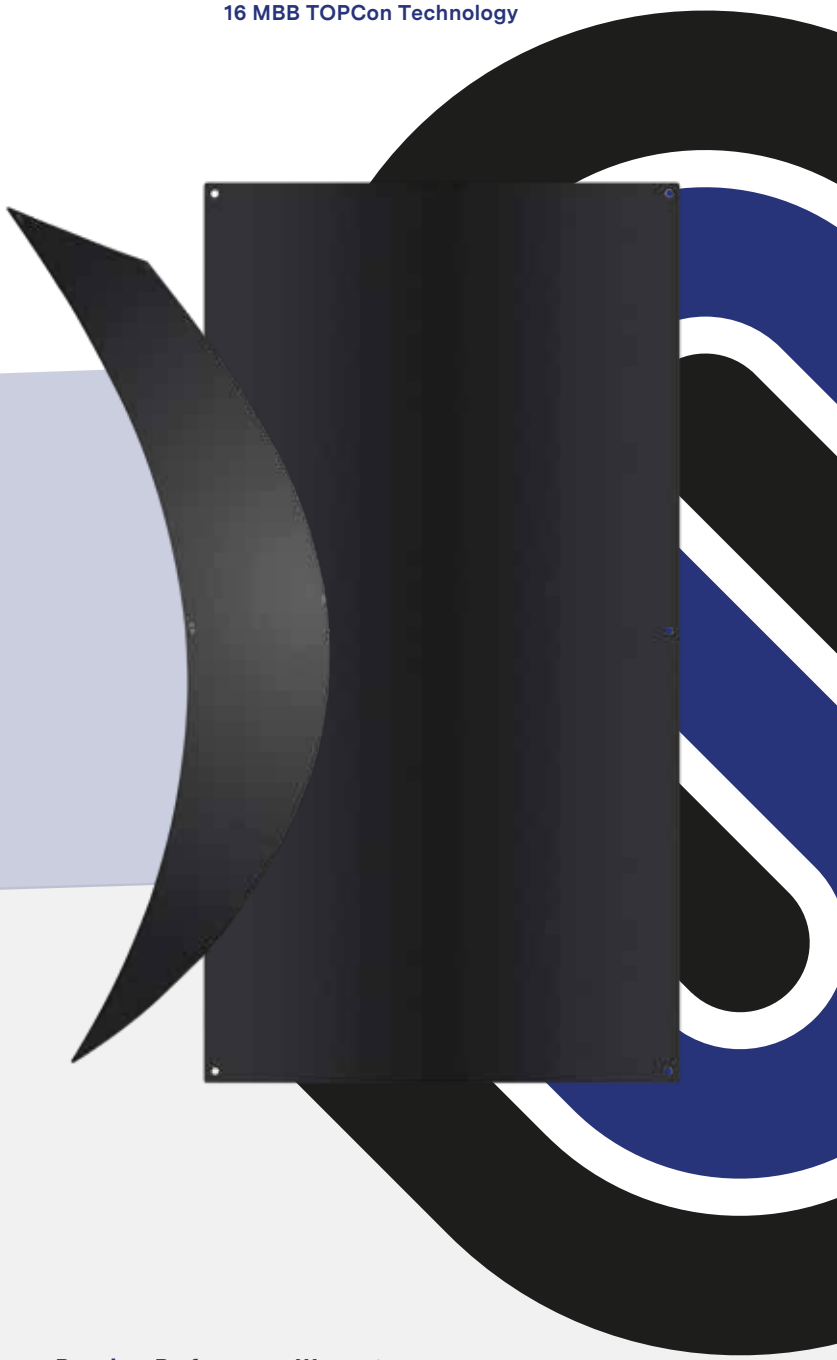
Product Information Sheet SNG 430-450 Watt TOPCon Technology

FLEX HC MONO

430-450 Watt

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

Highest quality with our cells
16 MBB TOPCon Technology



Quality and Safety

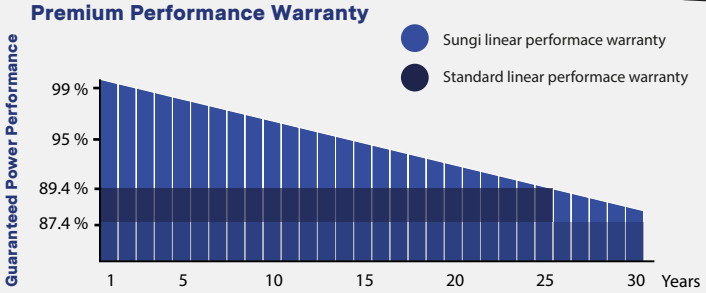
- Industry-leading power output warranty
  25 years / 89.4 %
  30 years / 87.4 %
- 30-year warranty on materials & workmanship
- Fire Test: Class 1

- **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

Premium Performance Warranty



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

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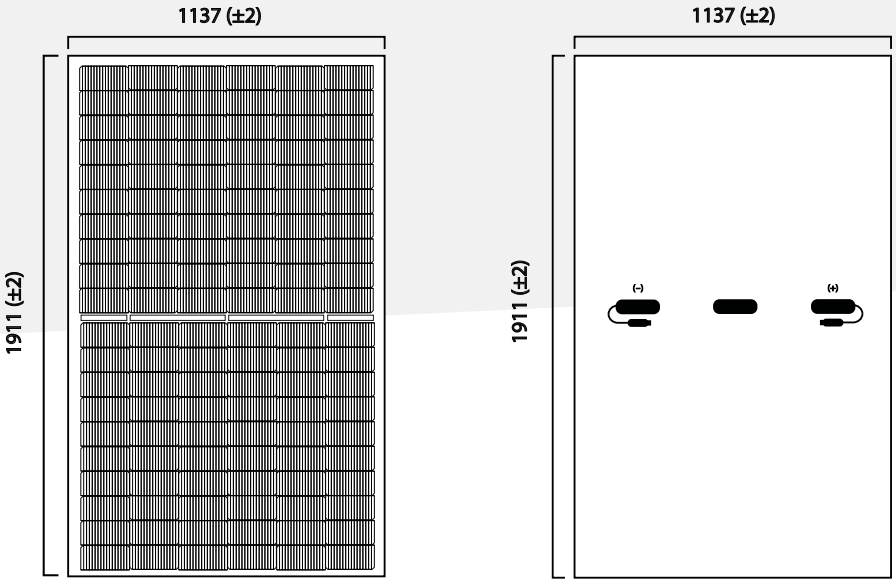
20.7 %
Max Module Efficiency

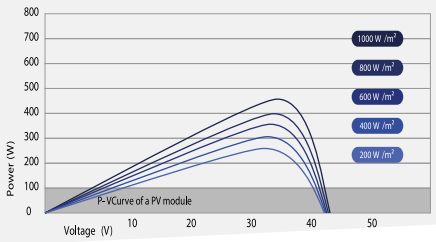
30 Y Warranty
on materials & workmanship

ENGINEERING DRAWINGS (mm)

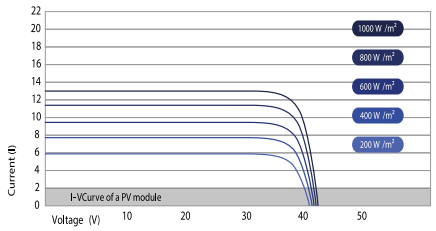


ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE | SNG - 450

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

Testing STC²/NMOT³ | Irradiance 1000 W/m 800 W/m | Module Temperature 25 °C | AM 1.5 Wind Speed | 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

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 mm² / UL 12 AWG*
Output Cables Length	1100 mm*
Connectors	MC 4 or compatible

PACKAGING CONFIGURATION

40' Container
- 68 pcs per pallet
- 24 pallets
- 1632 total pcs

20' Container
- 68 pcs per pallet
- 10 pallets
- 680 total pcs

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