

Product Information Sheet SNG 480-500 Watt TOPCon Technology

HC MONO 480-500 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**

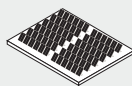
- ✓ **Anti-PID Guarantee**
Minimizes the risk of degradation caused by PID phenomena by optimizing cell production technology and material control.
- ✓ **Multi-busbar Technology**
Higher performance, higher reliability, and greater (electrical) resilience.



On-grid residential roof-tops



On-grid commercial Industrial roof-tops

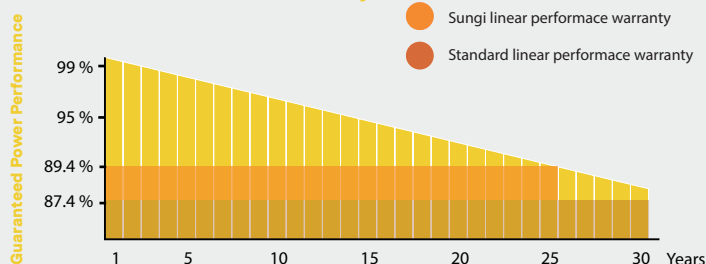


Solar power plants

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

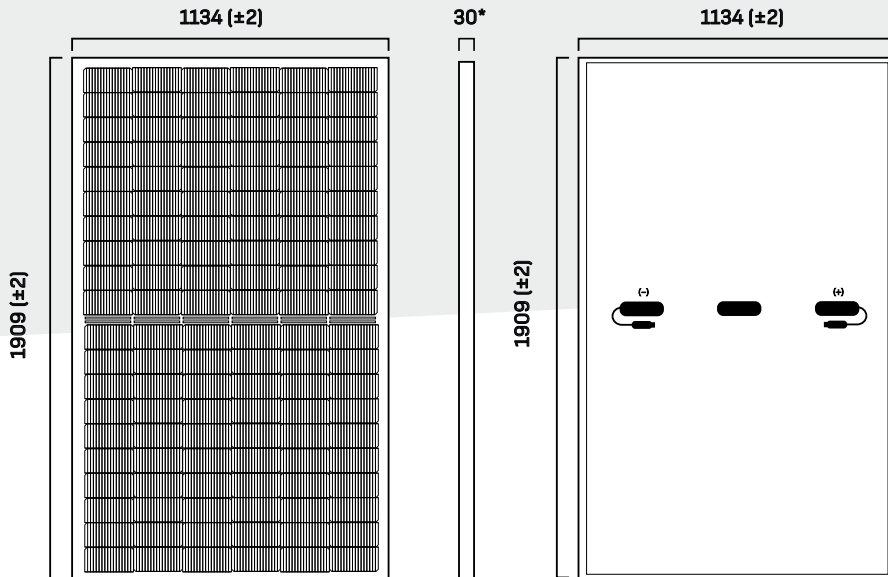
Premium Performance Warranty



23.09 %
Max Module Efficiency

30 Y Warranty
on materials & workmanship

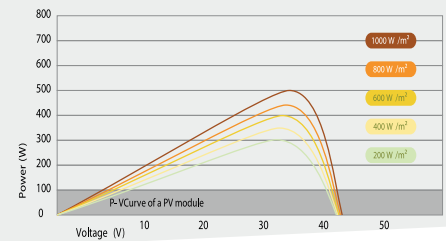
ENGINEERING DRAWINGS (mm)



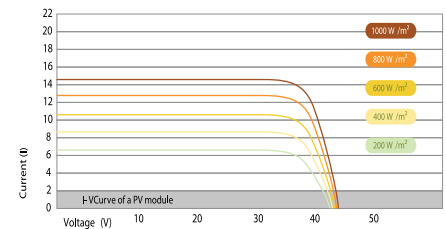
ELECTRICAL PERFORMANCE & TEMPERATURE

DEPENDENCE | SNG - 500

Power-Voltage Curves



Current-Voltage Curves



MODULE TYPE	SNG-480 W	SNG-485 W	SNG-490 W	SNG-495 W	SNG-500 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)	480 Wp	485 Wp	490 Wp	495 Wp	500 Wp
Maximum Power Voltage (Vmp)	35.38 V / 33.27 V	35.55 V / 33.44 V	35.72 V / 33.59 V	35.89 V / 33.75 V	36.06 V / 33.91 V
Maximum Power Current (Imp)	13.57 A / 10.85 A	13.65 A / 10.92 A	13.72 A / 10.97 A	13.79 A / 11.03 A	13.87 A / 11.09 A
Open-Circuit Voltage (Voc)	42.71 V / 40.57 V	42.88 V / 40.73 V	43.12 V / 40.96 V	43.32 V / 41.15 V	43.53 V / 41.35 V
Short-Circuit Current (Isc)	14.31 A / 11.55 A	14.39 A / 11.61 A	14.46 A / 11.67 A	14.55 A / 11.74 A	14.62 A / 11.80 A
Module Efficiency (%)	22.17 %	22.40 %	22.63 %	22.86 %	23.09 %

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	- 0.28 % / °C
Temperature Coefficients of Isc	+0.048 % / °C
Nominal Operating Cell Temperature (NOCT)	45 ± 2 °C

TECHNICAL SPECIFICATION

Cell type	TOPCon Technology (182x91 mm)
Number of cells	120 (2x60)
Dimensions	1909x1134x30* mm
Weight	23.7 kg
Front Glass	3.2 mm anti-reflection
Frame	Anodized Aluminum Alloy Black Frame*
Junction Box	IP68 Rated
Output Cables	TUV 1x4.0 mm² / UL 12 AWG*
Output Cables Length	1200 mm*
Connectors	MC 4

PACKAGING CONFIGURATION



40' Container

- 36 pcs per pallet
- 24 pallets
- 864 total pcs



20' Container

- 36 pcs per pallet
- 10 pallets
- 360 total pcs

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.