

Product Information Sheet SNG 400-420 Watt TOPCon Technology

HC MONO 400-420 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.



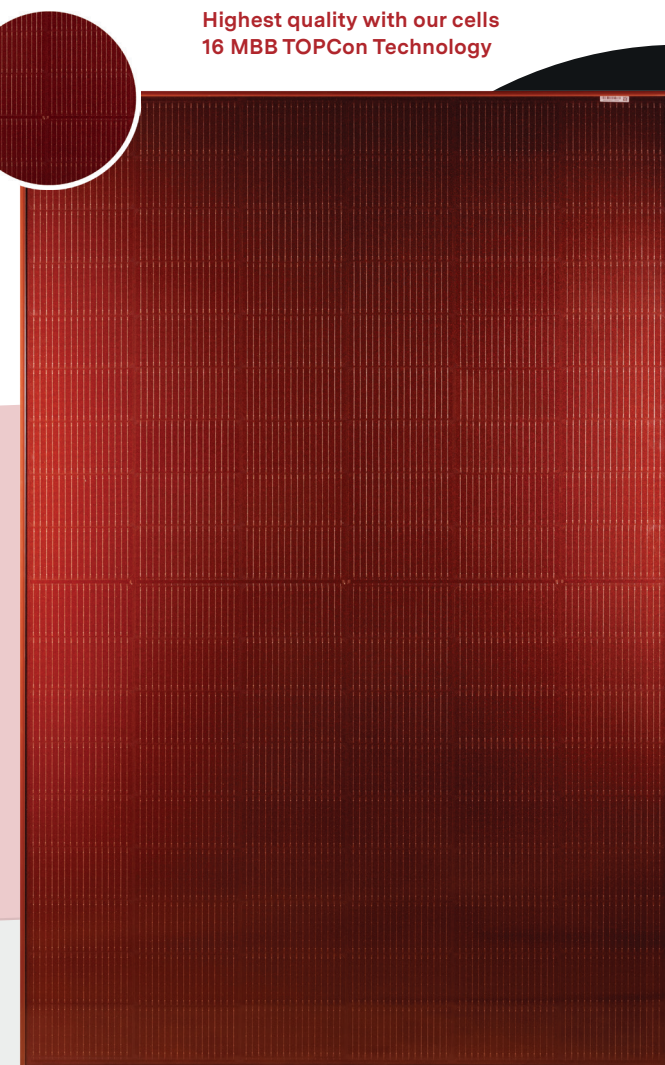
On-grid residential roof-tops



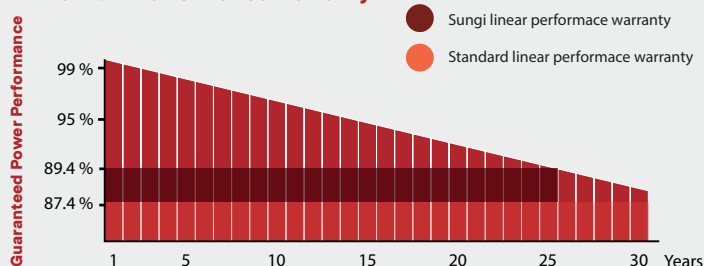
On-grid commercial Industrial roof-tops

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



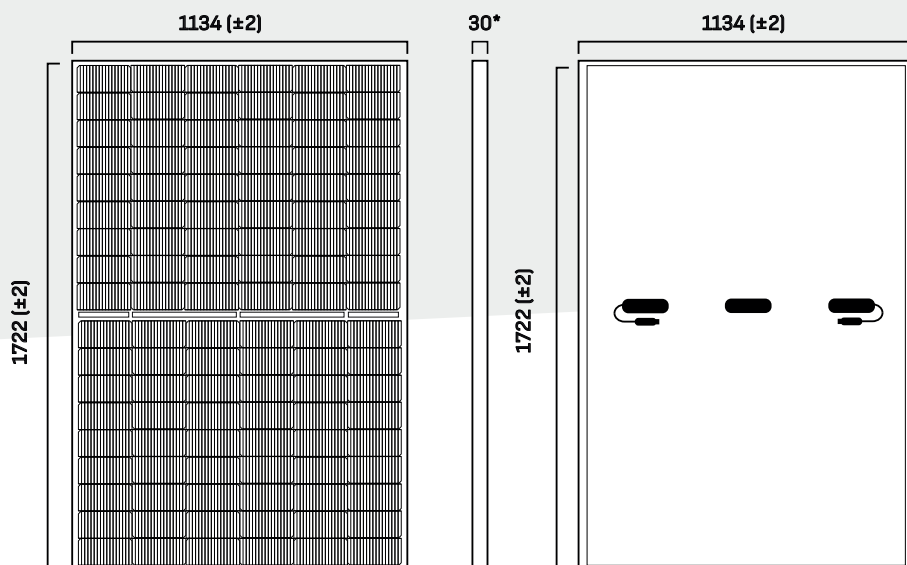
Premium Performance Warranty



21.50 %
Max Module Efficiency

30 Y Warranty
on materials & workmanship

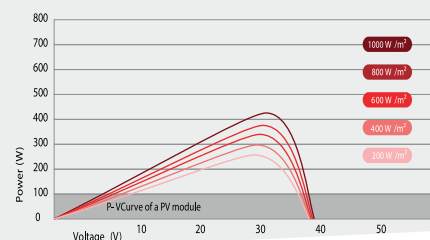
ENGINEERING DRAWINGS (mm)



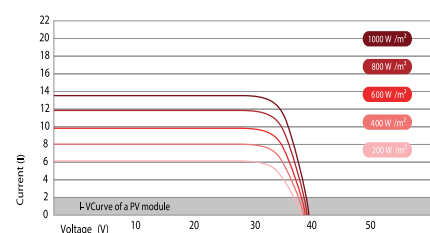
ELECTRICAL PERFORMANCE & TEMPERATURE

DEPENDENCE | SNG - 420

Power-Voltage Curves



Current-Voltage Curves



COLOR & SIZE
**FULLY
CUSTOMIZED**



MODULE TYPE	SNG-400 W	SNG-405 W	SNG-410 W	SNG-415 W	SNG-420 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)	400 Wp	405 Wp	410 Wp	415 Wp	420 Wp
Maximum Power Voltage (Vmp)	31.76 V / 29.81 V	31.94 V / 29.98 V	32.12 V / 30.15 V	32.30 V / 30.32 V	32.48 V / 30.49 V
Maximum Power Current (Imp)	12.60 A / 10.17 A	12.69 A / 10.24 A	12.77 A / 10.30 A	12.85 A / 10.37 A	12.94 A / 10.44 A
Open-Circuit Voltage (Voc)	38.43 V / 36.71 V	38.65 V / 36.92 V	38.87 V / 37.13 V	39.09 V / 37.34 V	39.31 V / 37.55
Short-Circuit Current (Isc)	13.31 A / 10.75 A	13.40 A / 10.82 A	13.49 A / 10.89 A	13.58 A / 10.96 A	13.66 A / 11.03 A
Module Efficiency (%)	20.48 %	20.74 %	20.99 %	21.25 %	21.50 %

ALL MODULES DATA

Operating Temperature (DC)	- 40 °C to + 85 °C
Maximum System Voltage	1500 VDC
Maximum Series Fuse Rating	25 A
Power Output Tolerance ⁽¹⁾	± 3 %
Temperature Coefficients of Pmax	- 0.29 % / °C
Temperature Coefficients of Voc	- 0.25 % / °C
Temperature Coefficients of Isc	+0.045 % / °C
Nominal Operating Cell Temperature (NOCT)	45 ± 2 °C

TECHNICAL SPECIFICATION

Cell type	TOPCon Technology (182x91 mm)
Number of cells	108 (2×54)
Dimensions	1722x1134x30* mm
Weight	18.9 kg
Front Glass	3.2 mm anti-reflection
Frame	Anodized Aluminum Alloy RED 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
- 26 pallets
- 936 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.