SUNGi SOLAR

SNG EUROPE

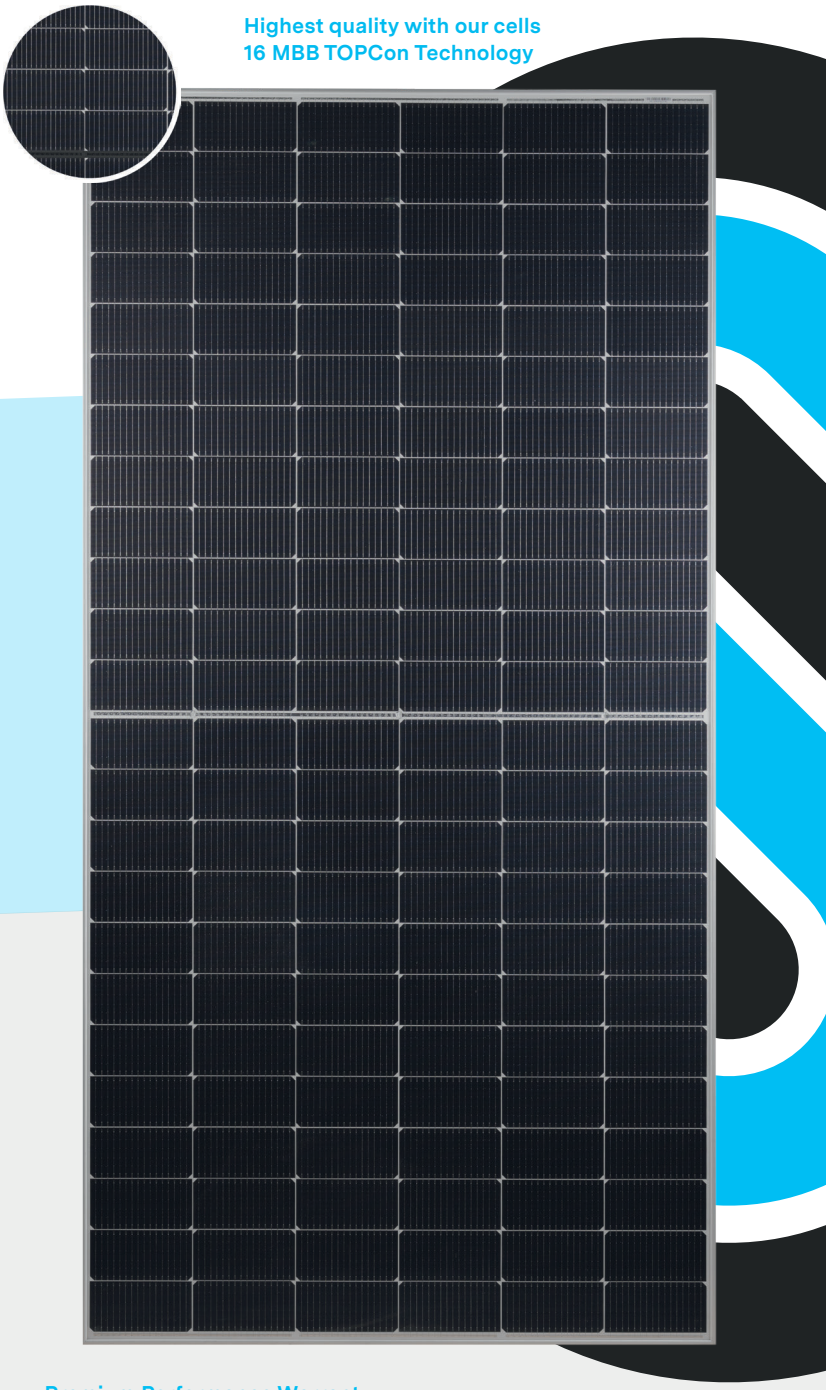
Product Information Sheet SNG 590-605 Watt TOPCon Technology

BIFACIAL

590-605 Watt

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

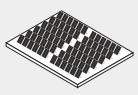
Highest quality with our cells
16 MBB TOPCon Technology



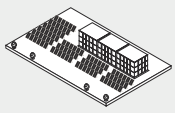
Quality and Safety

- Industry-leading power output warranty
  25 years / 89.4%
  30 years / 87.4 %
- 30-year warranty on materials & workmanship
- Fire Test: According to EN13501-1 and 13501-5

- **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.

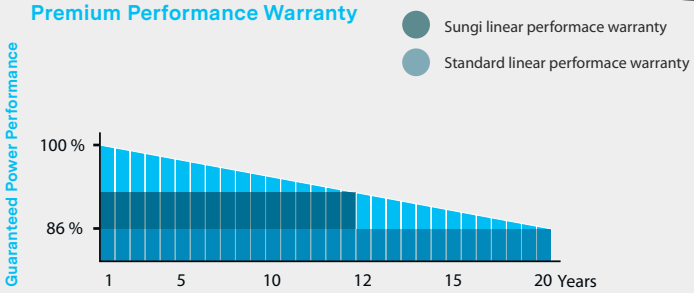


Solar power plants



Off-grid systems

Premium Performance Warranty



Complete System and Product Certifications

IEC 61215, IEC 61730, 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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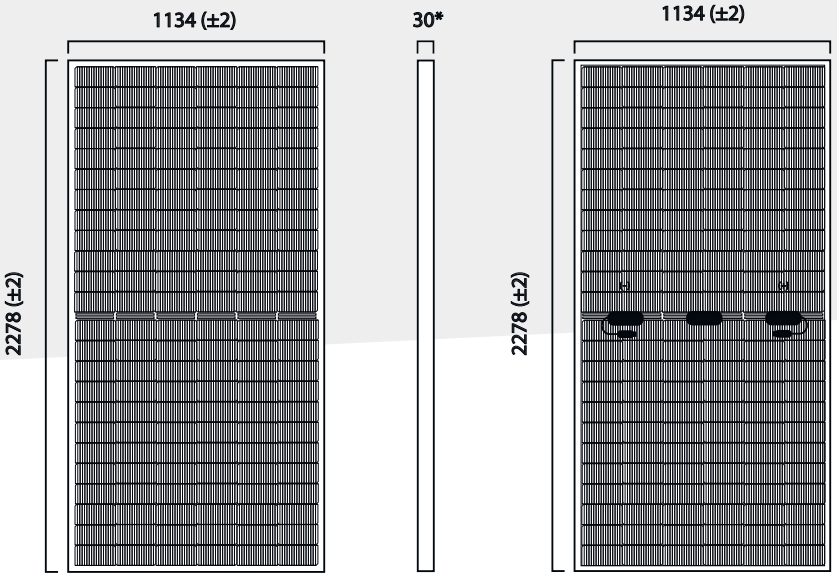
23.42 %
Max Module Efficiency

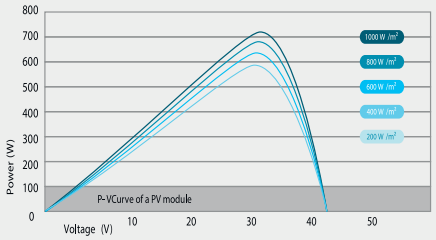
30 Y Warranty
on materials & workmanship

ENGINEERING DRAWINGS (mm)

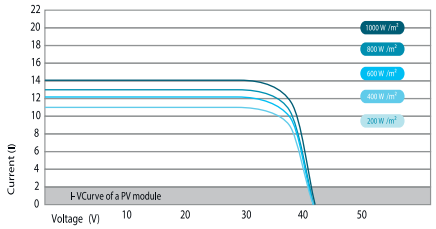


ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE | SNG605-B144DG

Power-Voltage Curves



Current-Voltage Curves



MODULE TYPE	SNG590-B144DG	SNG595-B144DG	SNG600-B144DG	SNG605-B144DG
Testing Conditions	STC[2]/ NMOT[3]	STC[2]/ NMOT[3]	STC[2]/ NMOT[3]	STC[2]/ NMOT[3]
Maximum Power at STC (Pmax)[1]	590 Wp	595 Wp	600 Wp	605 Wp
Maximum Power Voltage (Vmp)	42.90 V / 39.89 V	43.06 V / 40.00 V	43.22 V / 40.09 V	43.38 V / 40.19 V
Maximum Power Current (Imp)	13.76 A / 11.13 A	13.82 A / 11.17 A	13.89 A / 11.21 A	13.95 A / 11.26 A
Open-Circuit Voltage (Voc)[1]	51.87 V / 48.73 V	52.07 V / 48.88 V	52.27 V / 49.01 V	52.47 V / 49.15 V
Short-Circuit Current (Isc)[1]	14.49 A / 11.82 A	14.55 A / 11.89 A	16.01 A 14.61 A / 11.96 A	14.67 A / 12.04 A
Module Efficiency (%)	22.84 %	23.03 %	23.23 %	23.42 %

SPECIFICATIONS (BNPI)	SNG590-B144DG	SNG595-B144DG	SNG600-B144DG	SNG605-B144DG
Maximum Power (Pmax)[1]	649 Wp	655 Wp	660 Wp	666 Wp
Maximum Power Voltage (Vmp)	42.90 V	43.06 V	43.22 V	43.38 V
Maximum Power Current (Imp)	15.14 A	15.20 A	15.28 A	15.35 A
Open-Circuit Voltage (Voc)[1]	52.03 V	52.23 V	53.43 V	52.63 V
Short-Circuit Current (Isc)[1]	15.94 A	16.01 A	16.07 A	16.14 A
Module Efficiency (%)	25.12 %	25.35 %	25.54 %	25.78 %

ALL MODULES DATA

Operating Temperature	- 40 °C to + 85 °C
Maximum System Voltage	1500 VDC
Maximum Series Fuse Rating	25 A
Temperature Coefficients of Pmax	- 0.26 % / °C
Temperature Coefficients of Voc	- 0.23 % / °C
Temperature Coefficients of Isc	+0.045 % / °C
Nominal Operating Cell Temperature (NOCT)	43 ± 2 °C
Power sorting	0 + 4.99 Wp
Maximum Static Test Load	5400 Pa (Front) / 2400 Pa (Rear)

Testing STC²/NMOT³ | Irradiance 1000 W/m 800 W/m | Module Temperature 25 °C | AM 1.5 Wind Speed | Fire Rating Class 1

TECHNICAL SPECIFICATION

Cell type	TOPCon Technology (182.2x91.875 mm)
Number of cells	144 (2×72)
Dimensions	2278x1134x30* mm
Weight	28.7 kg
Front Glass	2.0 mm AR Tempered Glass
Back Glass	2.0 mm Tempered Glass
Frame	Anodized Aluminum Alloy Silver Frame*
Junction Box	IP68 Rated
Output Cables	TUV 1x4.0 mm² / UL 12 AWG*
Output Cables Length	1200 mm*
Connectors	MC 4 or Compatible

PACKAGING CONFIGURATION

40' Container

- 36 pcs per pallet
- 22 pallets
- 792 total pcs

MADE IN EUROPE

[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

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