SUNGI SOLAR

SNG ELITE

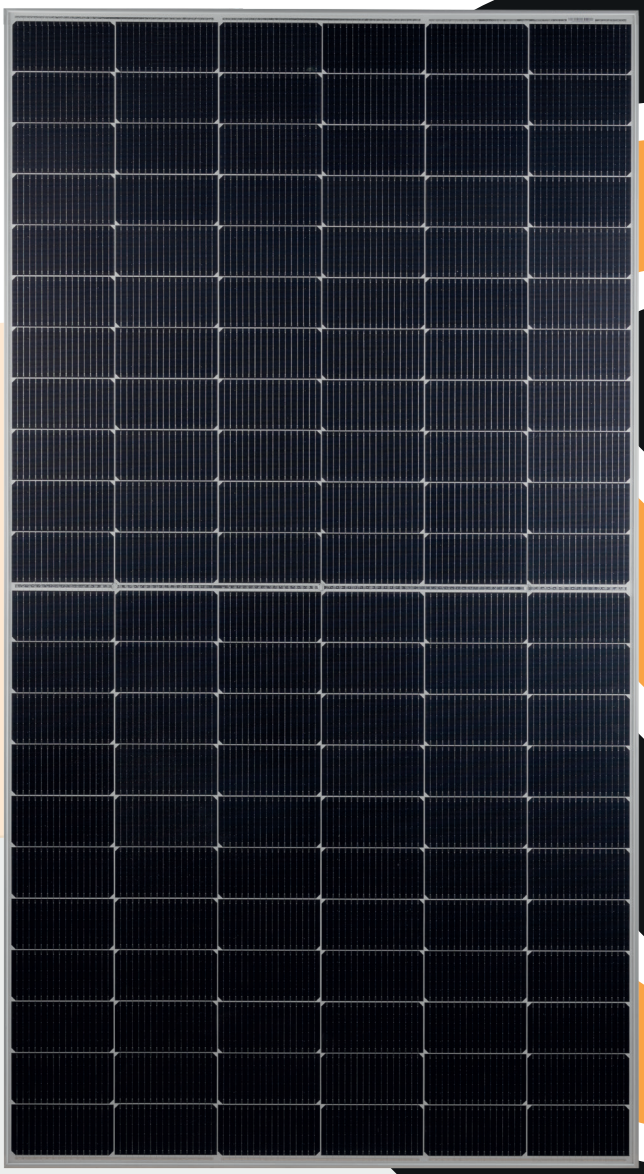
Product Information Sheet SNG 640-650 Watt HJT Technology

BIFACIAL

640–650 Watt

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

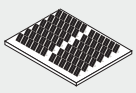
Highest quality with our cells
18 MBB HJT Technology



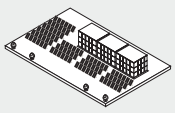
Quality and Safety

- 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.

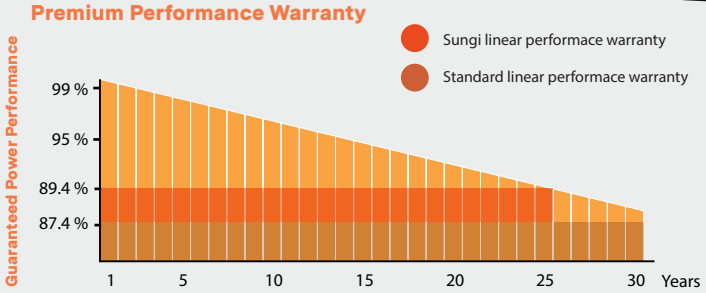


Solar power plants



Off-grid systems

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
IEC 62941:2019: Quality System for PV Module Manufacturing

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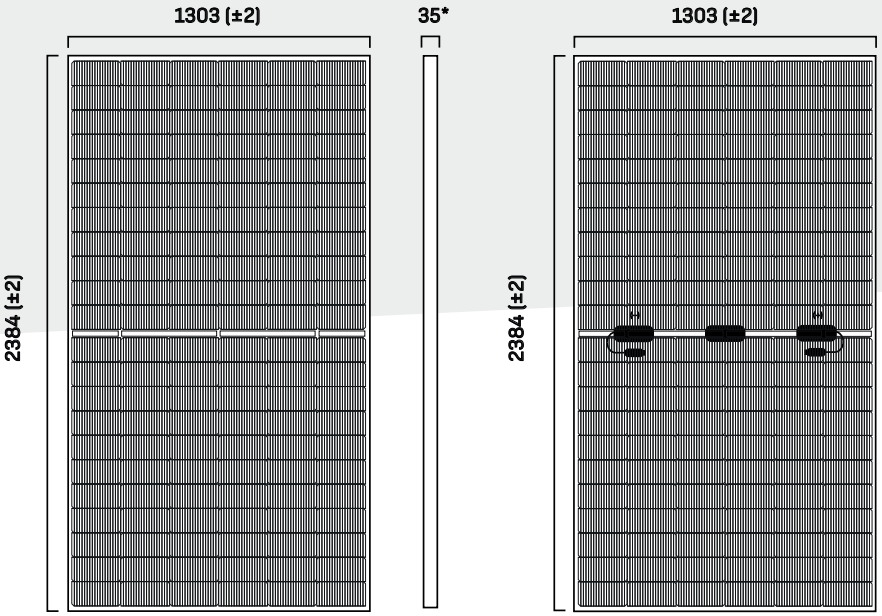
20.92% *Max Module Efficiency*

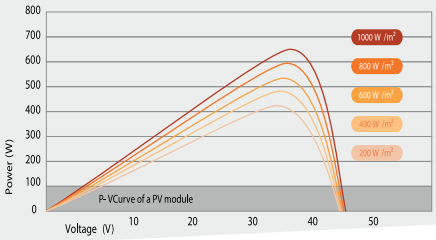
30 Y Warranty *on materials & workmanship*

ENGINEERING DRAWINGS (mm)

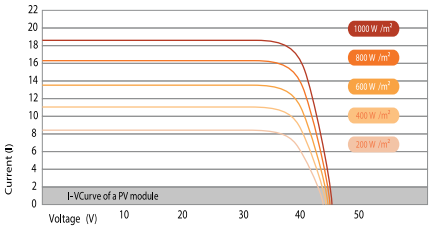


ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE | SNG - 650

Power-Voltage Curves



Current-Voltage Curves

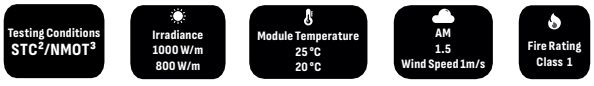


MODULE TYPE	SNG-640 W	SNG-645 W	SNG-650 W
Testing Conditions	STC[2]/ NMOT[3]	STC[2]/ NMOT[3]	STC[2]/ NMOT[3]
Maximum Power at STC (Pmax)	640 Wp	645 Wp	650 Wp
Maximum Power Voltage (Vmp)	37.30 V / 33.71 V	37.50 V / 33.89 V	37.70 V / 34.07 V
Maximum Power Current (Imp)	17.19 A / 14.42 A	17.23 A / 14.46 A	17.27 A / 14.50 A
Open-Circuit Voltage (Voc)	45.10 V / 40.54 V	45.30 V / 40.82 V	45.50 V / 41.10 V
Short-Circuit Current (Isc)	18.26 A / 15.42 A	18.31 A / 15.46 A	18.35 A / 15.50 A
Module Efficiency (%)	20.60 %	20.76 %	20.92 %

BIFACIAL OUTPUT- REARSIDE	SNG-640 W	SNG-645 W	SNG-650 W
Power gain 5 %	672 Wp	677 Wp	682 Wp
Power gain 10 %	736 Wp	741 Wp	747 Wp
Power gain 15 %	800 Wp	806 Wp	812 Wp

ALL MODULES DATA	
Operating Temperature (DC)	- 40 °C to + 85 °C
Maximum System Voltage	1500 VDC
Maximum Series Fuse Rating	35 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	HJT Technology (210x105 mm)
Number of cells	132 (2×66)
Dimensions	2384x1303x35* mm
Weight	40.5 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	1400 mm*
Connectors	MC 4



[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

PACKAGING CONFIGURATION

40' Container

- 31 pcs per pallet
- 18 pallets
- 558 total pcs