

Product Information Sheet SNG 490-505 Watt TOPCon Technology

BIFACIAL 490-505 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

 **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**

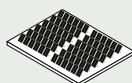
- ✓ **Anti-PID Guarantee**
Minimizes the risk of degradation caused by PID phenomena by optimizing cell production technology and material control.
- ✓ **Multi-busbar Technology**
Higher performance, higher reliability, and greater (electrical) resilience.



On-grid residential roof-tops



On-grid commercial Industrial roof-tops



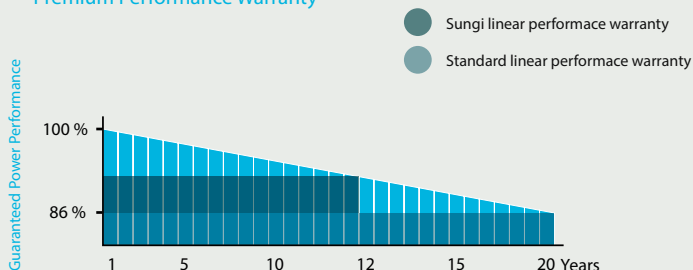
Solar power plants

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

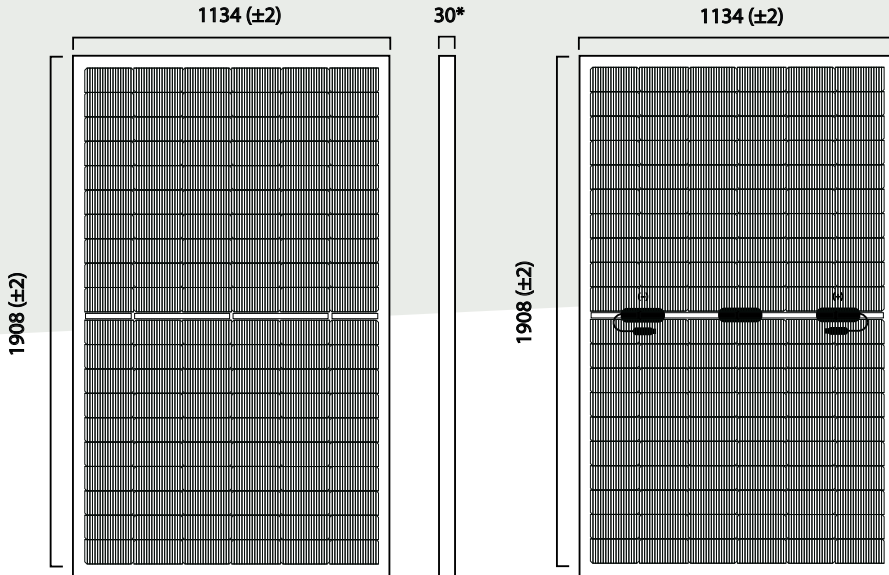


Premium Performance Warranty



23.34 %
Max Module Efficiency

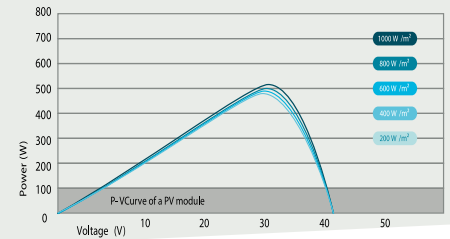
ENGINEERING DRAWINGS (mm)



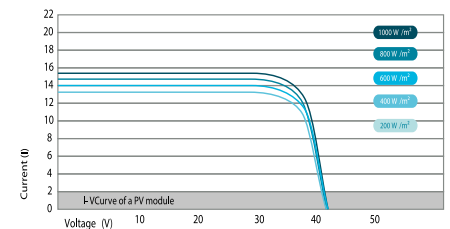
ELECTRICAL PERFORMANCE & TEMPERATURE

DEPENDENCE | SNG505-B120DG

Power-Voltage Curves



Current-Voltage Curves



MODULE TYPE	SNG490-B120DG	SNG495-B120DG	SNG500-B120DG	SNG505-B120DG
Testing Conditions	STC ⁽²⁾ / NMOT ⁽³⁾	STC ⁽²⁾ / NMOT ⁽³⁾	STC ⁽²⁾ / NMOT ⁽³⁾	STC ⁽²⁾ / NMOT ⁽³⁾
Maximum Power at STC (P _{max}) ⁽¹⁾	490 Wp	495 Wp	500 Wp	505 Wp
Maximum Power Voltage (V _{mp})	35.72 V / 33.46 V	35.90 V / 33.55 V	36.08 V / 33.65 V	36.26 V / 33.74 V
Maximum Power Current (I _{mp})	13.73 A / 11.03 A	13.81 A / 11.10 A	13.87 A / 11.19 A	13.93 A / 11.27 A
Open-Circuit Voltage (V _{oc}) ⁽¹⁾	43.05 V / 40.80 V	43.22 V / 40.99 V	43.39 V / 41.18 V	43.56 V / 41.36 V
Short-Circuit Current (I _{sc}) ⁽¹⁾	14.47 A / 11.71 A	14.55 A / 11.77 A	14.63 A / 11.82 A	14.71 A / 11.88 A
Module Efficiency (%)	22.65 %	22.88 %	23.11 %	23.34 %

SPECIFICATIONS (BNPI)	SNG490-B120DG	SNG495-B120DG	SNG500-B120DG	SNG505-B120DG
Maximum Power (P _{max}) ⁽¹⁾	539 Wp	545 Wp	550 Wp	556 Wp
Maximum Power Voltage (V _{mp})	35.72 V	35.90 V	36.08 V	36.26 V
Maximum Power Current (I _{mp})	15.10 A	15.19 A	15.26 A	15.32 A
Open-Circuit Voltage (V _{oc}) ⁽¹⁾	43.18 V	43.35 V	43.52 V	43.69 V
Short-Circuit Current (I _{sc}) ⁽¹⁾	15.92 A	16.01 A	16.09 A	16.18 A

ALL MODULES DATA

Operating Temperature	- 40 °C to + 85 °C
Maximum System Voltage	1500 VDC
Maximum Series Fuse Rating	25 A
Temperature Coefficients of P _{max}	- 0.26 % / °C
Temperature Coefficients of V _{oc}	- 0.23 % / °C
Temperature Coefficients of I _{sc}	+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)



⁽¹⁾ Measurement Tolerances : P_{max} (± 3 %), I_{sc} & V_{oc} (± 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 reserves all the rights to final integrations.

TECHNICAL SPECIFICATION

Cell type	TOPCon Technology (182.2x91.875 mm)
Number of cells	120 (2x60)
Dimensions	1908x1134x30* mm
Weight	28.4 kg
Front Glass	2.0 mm AR Tempered Glass
Back Glass	2.0 mm Tempered Glass
Frame	Anodized Aluminum Alloy Black Frame*
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

- 31 pcs per pallet
- 26 pallets
- 806 total pcs

