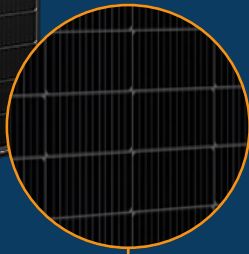


BIFACIAL 580 - 600 Watt Total Black



Key features

- ✔ Passed IEC 5400 Pa mechanical loading test.
- ✔ The modules can withstand high wind-pressure, snow loads and extreme temperatures.
- ✔ Our high performing modules have an industry low tolerance of 0±5%.
- ✔ Our solar cells offer high conversion efficiency to ensure the highest quality.
- ✔ Highest quality with our cells.



Highest quality with our cells.
16MBB Top Con Technology

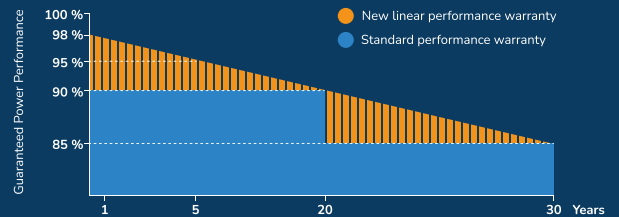


Quality and safety

- ✔ Industry leading power output warranty
20 years / 90%
30 years / 85,2%
- ✔ 30-year warranty on materials & workmanship
- ✔ Fire test: Class 1



Premium performance warranty



Applications



On-grid residential roof-tops



On-grid commercial-industrial roof-tops

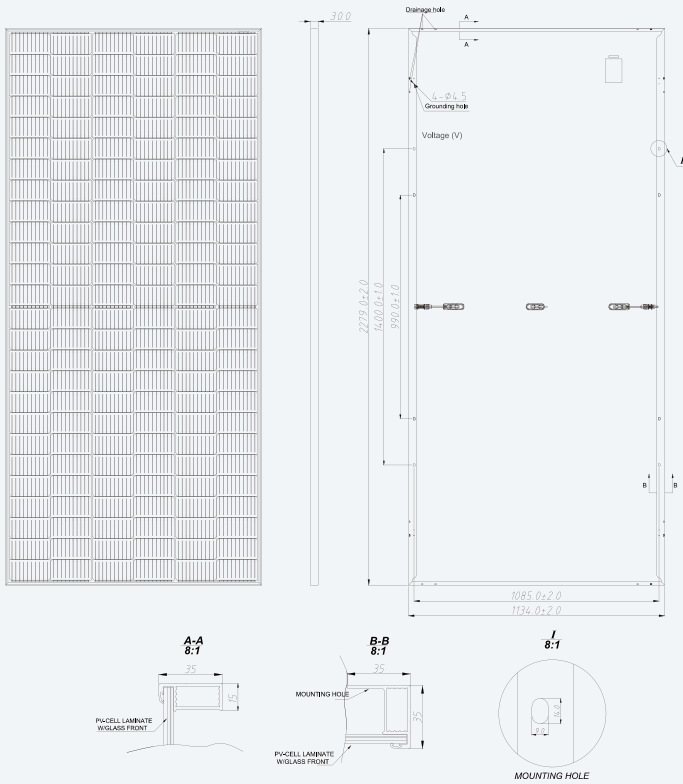


Solar power plants



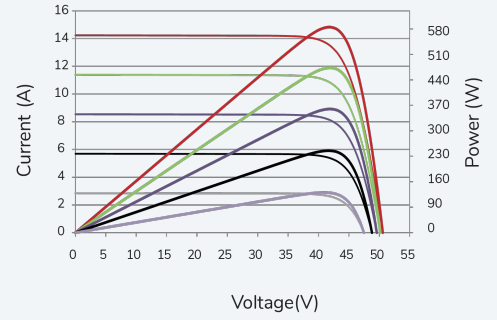
Off-grid systems

Engineering drawings

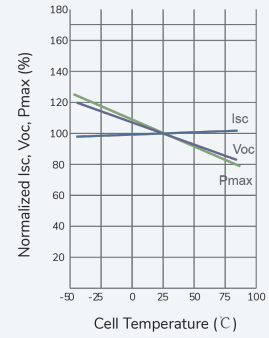


Electrical performance & temperature dependence

Current-Voltage & Power-Voltage Curves (580W)



Temperature Dependence of ISC, Voc, Pmax



Electrical characteristics

Module Type	SNG580M-144	SNG585M-144	SNG590M-144	SNG595M-144	SNG600M-144
TESTING CONDITION⁽¹⁾	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)	580Wp/439Wp	585Wp/443Wp	590Wp/447Wp	595Wp/451Wp	600Wp/455W
Maximum Power Voltage (Vmp)	43.22V/40.57V	43.41V/40.75V	43.60V/40.92V	43.79V/41.10V	43.98V/41.28V
Maximum Power Current (Imp)	13.42A/10.83A	13.48A/10.88A	13.54A/10.93A	13.59A/10.97A	13.65A/11.02A
Open-circuit Voltage (Voc)	52.30V/49.96V	52.54V/50.19V	52.77V/50.41V	53.00V/50.63V	53.23V/50.85V
Short-circuit Current (Isc)	14.18A/11.45A	14.24A/11.50A	14.30A/11.55A	14.36A/11.59A	14.42A/11.64A
Module Efficiency (%)	22.4%	22.6%	22.8%	23.0%	23.2%
Operating Temperature °C		-40°C ± ~ +85°C			
Maximum system voltage		1500V			
Maximum series fuse rating		25A			
Power tolerance		±5%			
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			

Mechanical data

Cell type	Top Con Technology (182x91mm)
No. of cells	144 (2x72)
Dimensions	2279x1134x30mm/ 2279x1134x35mm
Weight	27.8 kg/28.3kg
Double glass	3.2mm anti-reflective
Frame	Anodized Aluminium Alloy Total Black
Junction Box	IP68 Rated
Output Cables	TUV: 1x4.0mm ² /UL 12AWG Length: 400/1400mm or customized length
Connectors	Copper, Silver Plated, MC 4

Packaging configuration

Dimensions	30mm	35mm
No. of pieces per pallet	36	31
Total number of pallets	20	20
Module quantity per 40' container	720	620

(1) Measurement Tolerances: Pmax (+/- 5%), Isc & Voc (+/- 5%) - Power Classification 0/+5%
 (2) STC (Standard Testing Condition): Irradiance 1000w/m², Cell Temperature 25°C, AM 1.5
 (3) NMOT (Nominal Operating Module Temperature): Irradiance 800w/m², NMOT: Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Bifacial output-rearside power gain

5%	609Wp	614Wp	619Wp	624Wp	630Wp
15%	667Wp	672Wp	678Wp	684Wp	690Wp
25%	725Wp	731Wp	737Wp	743Wp	750Wp

STC/NMOT



Irradiance 1000W/m² / 800W/m²



Module Temperature 25°C



AM = 1.5