

Highest quality with our cells.
10MBB Half Cut P-Type Technology

BIFACIAL

580 - 600 Watt

Silver Frame



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.

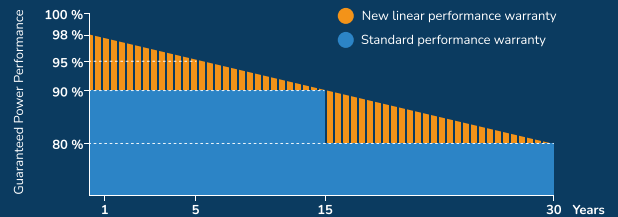


Quality and safety

- ✓ Industry leading power output warranty
15 years / 90%
30 years / 80%
- ✓ 25-year warranty on materials & workmanship
- ✓ Fire test: Class 1



Premium performance warranty



Applications



On-grid residential roof-tops



On-grid commercial-industrial roof-tops

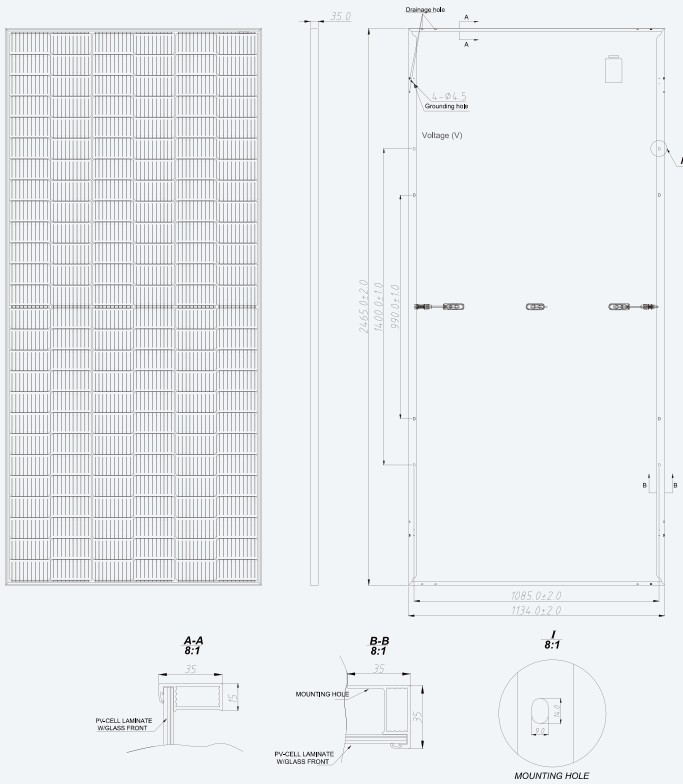


Solar power plants



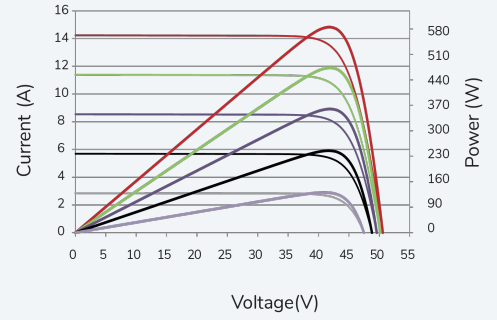
Off-grid systems

Engineering drawings

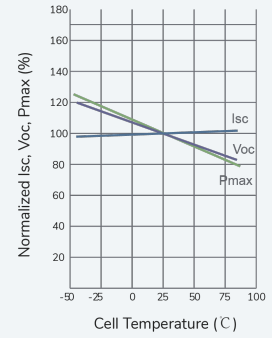


Electrical performance & temperature dependence

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/436Wp	585Wp/440Wp	590Wp/444Wp	595Wp/448Wp	600Wp/452Wp
Maximum Power Voltage (Vmp)	42.80V/39.86V	43.00V/40.00V	43.20V/40.15V	43.40V/40.29V	43.60V/40.43V
Maximum Power Current (Imp)	13.56A/10.94A	13.61A/11.00A	13.66A/11.06A	13.71A/11.12A	13.77A/11.18A
Open-circuit Voltage (Voc)	50.93V/48.89V	51.17V/49.08V	51.41V/49.27V	51.65V/49.46V	51.88V/49.65V
Short-circuit Current (Isc)	14.36A/11.60A	14.42A/11.65A	14.48A/11.70A	14.53A/11.75A	14.59A/11.80A
Module Efficiency (%)	22.44%	22.64%	22.83%	23.02%	23.22%
Operating Temperature OC		-40°C ± ~ +85°C			
Maximum system voltage		1500V DC			
Maximum series fuse rating		30A			
Power tolerance		0±5%			
Temperature coefficients of Pmax		-0.35%/°C			
Temperature coefficients of Voc		-0.328%/°C			
Temperature coefficients of Isc		0.048%/°C			
Nominal operating cell temperature (NOCT)		45±2°C			

Mechanical data

Cell type	Half Cut P-Type 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 Silver Frame
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
No. of pieces per pallet	20
Total number of pallets	36
Module quantity per 40' container	720

(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