

HC MONO

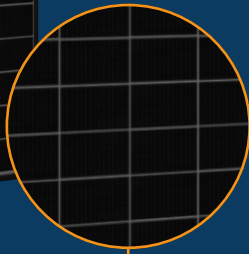
670 - 690 Watt

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.
18MBB Heterojunction Technology

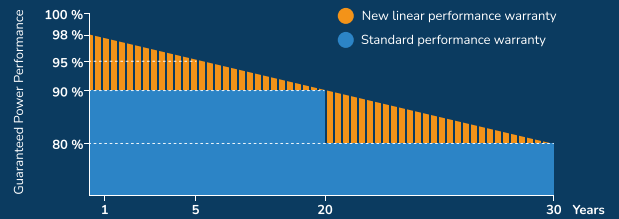


Quality and safety

- ✔ Industry leading power output warranty
20 years / 90%
30 years / 80%
- ✔ 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

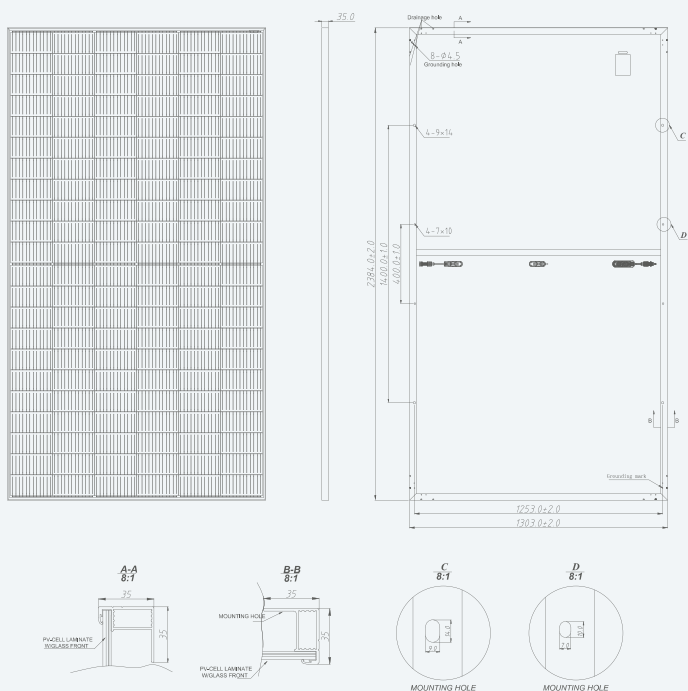


Solar power plants



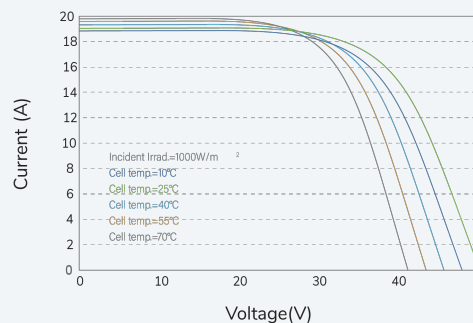
Off-grid systems

Engineering drawings

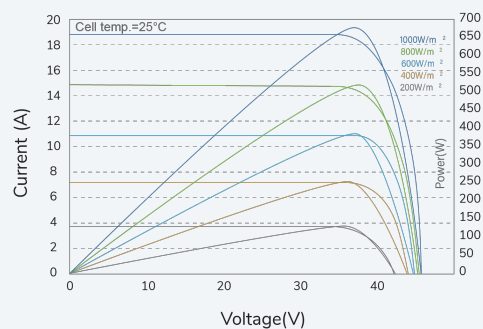


Electrical performance & temperature dependence

I-V CURVES AT DIFFERENT TEMPERATURE (670W)



I-V / P-V CURVE AT DIFFERENT TEMPERATURE (670W)



Electrical characteristics

Module Type	SNG670M-132	SNG675M-132	SNG680M-132	SNG685M-132	SNG690M-132
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)	670Wp/510Wp	675Wp/514Wp	680Wp/518Wp	685Wp/522Wp	690Wp/526Wp
Maximum Power Voltage (Vmp)	38.20V/34.79V	38.40V/34.97V	38.60V/35.15V	38.80V/35.32V	39.00V/35.50V
Maximum Power Current (Imp)	17.55A/14.66A	17.59A/14.70A	17.63A/14.74A	17.67A/14.78A	17.71A/14.82A
Open-circuit Voltage (Voc)	46.10V/41.92V	46.30V/42.10V	46.50V/42.28V	46.70V/42.46V	46.90V/42.64V
Short-circuit Current (Isc)	18.62A/15.66A	18.66A/15.70A	18.71A/15.74A	18.75A/15.78A	18.80A/15.82A
Module Efficiency (%)	21.57%	21.73%	21.89%	22.05%	22.21%
Operating Temperature OC	-40°C ± ~ +85°C				
Maximum system voltage	1500V				
Maximum series fuse rating	35				
Power tolerance	0±5%				
Temperature coefficients of Pmax	-0.43%/°C				
Temperature coefficients of Voc	-0.30%/°C				
Temperature coefficients of Isc	0.04%/°C				
Nominal operating cell temperature (NOCT)	45±2 °C				

Mechanical data

Cell type	Heterojunction Technology (210x210mm)
No. of cells	132 (2x66)
Dimensions	2384x1303x35mm
Weight	33.5 kg
Front Glass	2.00mm, Anti-Reflection
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	35mm
No. of pieces per pallet	31
Total number of pallets	17
Module quantity per 40' container	527

(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

STC/NMOT



Irradiance 1000W/m² / 800W/m²



Module Temperature 25°C



AM = 1.5