

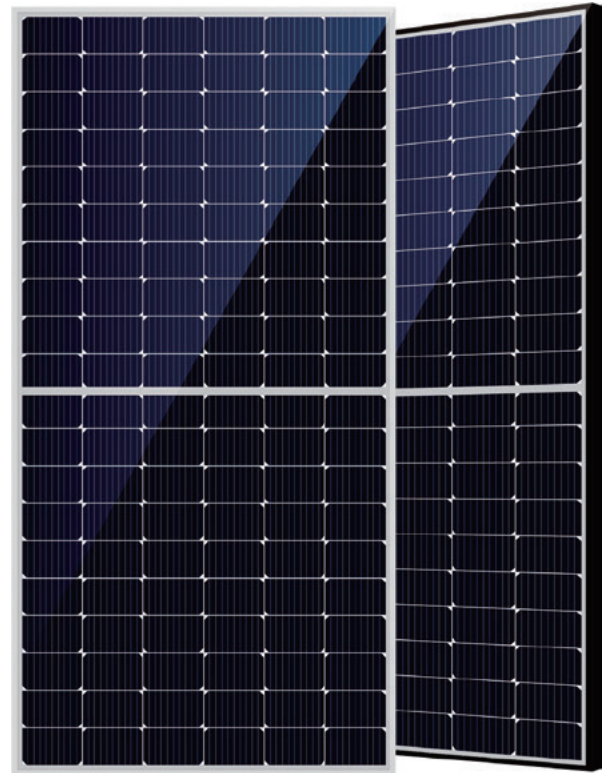
HEGA-Mo-BG Series

182mm bifacial dual glass half cut cell technology

435-455W

20.9% MODULE EFFICIENCY **0~+5w** POSITIVE POWER TOLERANCE

TYPE: HGT-S120|M10H-XXX-BG



455w

Max. Power Output



HIGH CUSTOMER VALUE

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance Of System) cost, shorter payback time
- Lower guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components



HIGH RELIABILITY

- Minimized micro-cracks with innovation non-destructive cutting technology ensured PID resistance through cell process and module material control.
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



HIGH ENERGY YIELD

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions



HIGH POWER UP TO 455W

- Large area cells based on 182mm silicon wafers and half-cut cell technology
- Up to 20.9% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection

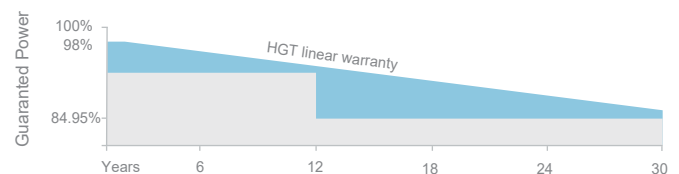
Materials and workmanship warranty
12
Years

2.00%
First Year Power Degradation

Linear power warranty
30
Years

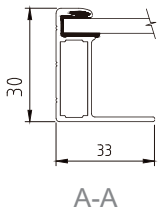
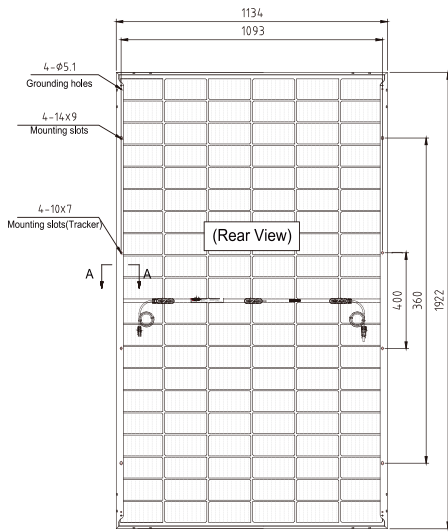
0.45%
Annual Degradation

PERFORMANCE WARRANTY



JP-AC

DIMENSIONS OF PV MODULE(mm)



ELECTRICAL DATA (STC)

Parameter	435W	440W	445W	450W	455W
Maximum Power (Pmax)	435W	440W	445W	450W	455W
Power Tolerance-PMAX(W)	0 ~ +5W				
Maximum Power Voltage (Vmp)	33.70V	33.90V	34.10V	34.30V	34.50V
Maximum Power Current (Imp)	12.91A	12.98A	13.06A	13.14A	13.20A
Open Circuit Voltage (Voc)	40.80V	41.00V	41.20V	41.40V	41.60V
Short Circuit Current (Isc)	13.34A	13.41A	13.49A	13.60A	13.69A
Module Efficiency η_m (%)	20.0%	20.2%	20.4%	20.6%	20.9%

STC: Irradiance 1000W/m², Module Temperature 25°C, AM=1.5;
*Tolerance of Pmax is within ±3%.

ELECTRICAL DATA (NMOT)

Parameter	435W	440W	445W	450W	455W
Maximum Power (Pmax)	327.3W	331.1W	334.8W	338.6W	342.3W
Maximum Power Voltage (Vmp)	31.30V	31.50V	31.80V	32.00V	32.20V
Maximum Power Current (Imp)	10.47A	10.51A	10.54A	10.59A	10.64A
Open Circuit Voltage (Voc)	37.90V	38.20V	38.50V	38.70V	39.00V
Short Circuit Current (Isc)	10.95A	10.99A	11.03A	11.07A	11.11A

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s.

ELECTRICAL DATA (AT 10% BIFACIAL POWER OUTPUT)

Parameter	435W	440W	445W	450W	455W
Maximum Power (Pmax)	478.5W	484W	489.5W	495W	500.5W
Maximum Power Voltage (Vmp)	33.7V	33.9V	34.1V	34.3V	34.5V
Maximum Power Current (Imp)	14.20A	14.28A	14.37A	14.45A	14.52A
Open Circuit Voltage (Voc)	40.8V	41V	41.2V	41.4V	41.6V
Short Circuit Current (Isc)	14.67A	14.75A	14.84A	14.96A	15.06A

*Rear side power gain: The additional gain from the rear side compared to the power of the front side at the STC.
It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

MECHANICAL DATA

Solar Cells	Monocrystalline silicon 182mm
No. of cells	120 cells (6x20)
Module Dimensions	1922 × 1134 × 30 mm
Weight	27 kg
Glass	2.0+2.0 mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Frame	Anodized Aluminium Alloy (silver/black)
J-Box	IP 68 rated (3 bypass diodes)
Cables	4.0mm ² , cable length +350mm/-350mm or customized length
Connector	MC4 Compatible

TEMPERATURE RATINGS

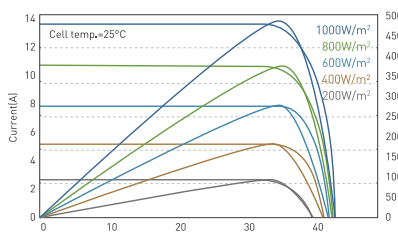
NMOT(Nominal Operating Cell Temperature)	42 ± 2 °C
Temperature Coefficient of P _{MAX}	-0.36%/°C
Temperature Coefficient of V _{OC}	-0.28%/°C
Temperature Coefficient of I _{SC}	0.050%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

MAXIMUM RATINGS

Operational Temperature	-40~+85 °C
Maximum System Voltage	1500V/DC(IEC)
Max Series Fuse Rating	25A

Current-Voltage & Power-Voltage Curve(450W)



WARRANTY

12 year Product Workmanship Warranty
30 year Power Warranty
2% first year degradation
0.45% Annual Power Attenuation

((Please refer to product warranty for details))

PACKAGING CONFIGURATION

Pieces per pallet	36
Pallets per container	24
Pieces per container 40'HC	864
Packaging box dimensions	1960x1140x1270mm
Packaging box weight	1013kg