

HEGA-Mo Series

166mm half cut cell technology

440-460W

21.1% MODULE EFFICIENCY **0~+5w** POSITIVE POWER TOLERANCE

TYPE: HGT-S144|M6H-XXX

460w

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



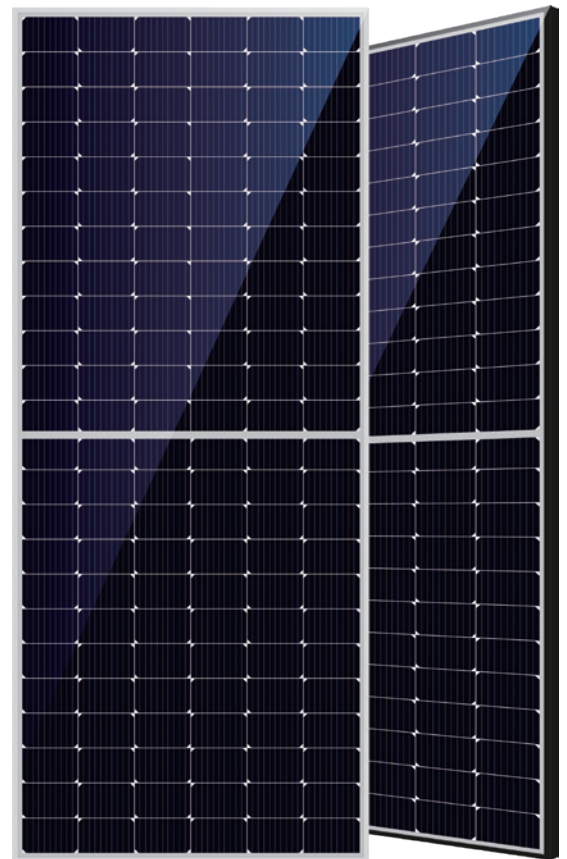
HIGH ENERGY YIELD

- 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 460W

- Large area cells based on 166mm silicon wafers and half-cut cell technology
- Up to 21.1% 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

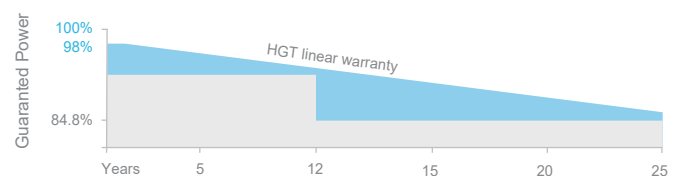
Linear power warranty

25
Years

0.55%

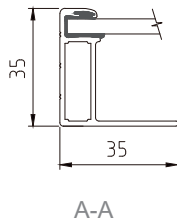
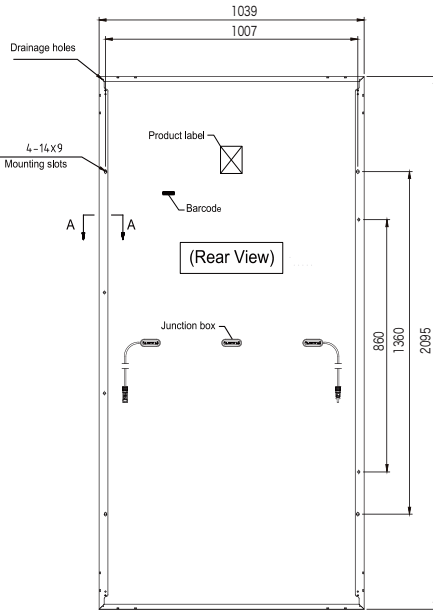
Annual Degradation

PERFORMANCE WARRANTY



HEGA-Mo 440-460W

DIMENSIONS OF PV MODULE(mm)



ELECTRICAL DATA (STC)

Parameter	440W	445W	450W	455W	460W
Maximum Power (P _{max})	440W	445W	450W	455W	460W
Power Tolerance-P _{MAX} (W)	0 ~ +5W				
Maximum Power Voltage (V _{mp})	41.0V	41.2V	41.4V	41.6V	41.8V
Maximum Power Current (I _{mp})	10.74A	10.81A	10.87A	10.94A	11.01A
Open Circuit Voltage (V _{oc})	48.8V	49.0V	49.2V	49.4V	49.6V
Short Circuit Current (I _{sc})	11.47A	11.54A	11.61A	11.68A	11.75A
Module Efficiency η_m (%)	20.2%	20.4%	20.7%	20.9%	21.1%

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
*Measuring tolerance: ±3%.

ELECTRICAL DATA (NMOT)

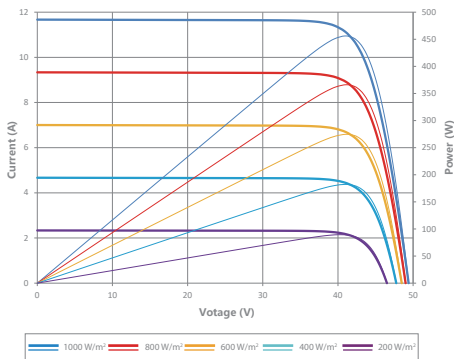
Parameter	327.5W	331.2W	335W	338.6W	342.3W
Maximum Power (P _{max})	327.5W	331.2W	335W	338.6W	342.3W
Maximum Power Voltage (V _{mp})	38.1V	38.3V	38.5V	38.7V	38.9V
Maximum Power Current (I _{mp})	8.59A	8.65A	8.70A	8.75A	8.80A
Open Circuit Voltage (V _{oc})	46.4V	46.6V	46.8V	47.0V	47.2V
Short Circuit Current (I _{sc})	9.08A	9.14A	9.19A	9.24A	9.29A

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline silicon 166mm
No. of cells	144 cells (6x24)
Module Dimensions	2095 × 1039 × 35 mm
Weight	23.5 kg
Glass	High Transmission, AR Coated fully tempered Glass
Encapsulant Material	EVA
Frame	Anodized Aluminium Alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	4.0mm ² cable length +350mm/-350mm or customized length
Connector	MC4 Compatible

Current-Voltage & Power-Voltage Curve (455W)



TEMPERATURE RATINGS

NMOT(Nominal Operating Cell Temperature)	42 ± 2 °C
Temperature Coefficient of P _{MAX}	-0.36%/°C
Temperature Coefficient of V _{OC}	-0.304%/°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	20A

WARRANTY

12 year Product Workmanship Warranty
25 year Power Warranty
2% first year degradation
0.55% Annual Power Attenuation

PACKAGING CONFIGURATION

Pieces per pallet	31
Pallets per container	22
Pieces per container 40'HC	682
Packaging box dimensions	2145X1140X1258mm
Packaging box weight	784kg