

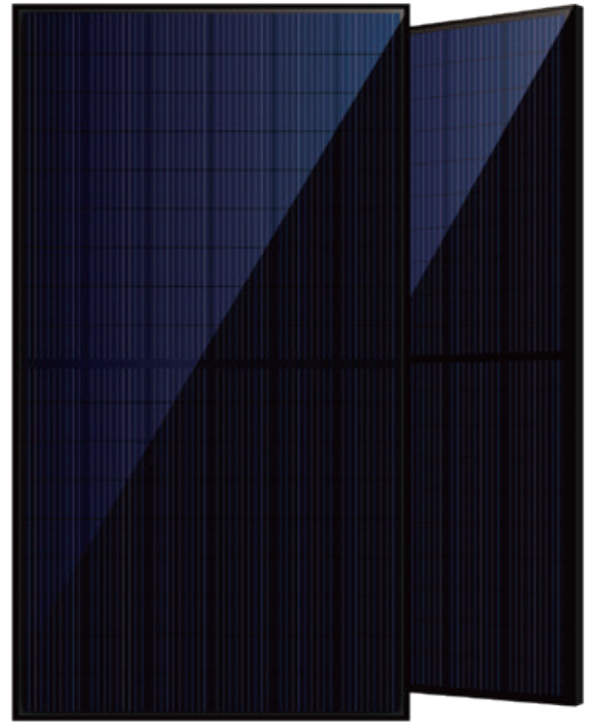
BLACK PEARL Series

182mm monofacial full black half cut cell technology

390-405W

20.7% MODULE EFFICIENCY **0~+5w** POSITIVE POWER TOLERANCE

Type: HGT-S108|M10Hb-xxx



405w

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 405W

- Large area cells based on 182mm silicon wafers and half-cut cell technology
- Up to 20.7% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection

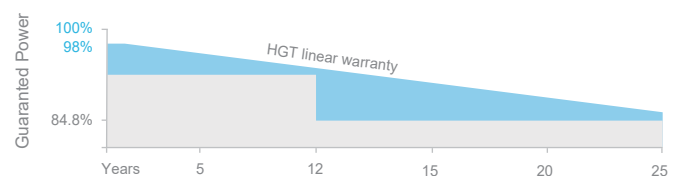
Materials and workmanship warranty **12** Years

2.00% First Year Power Degradation

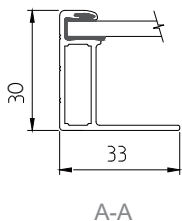
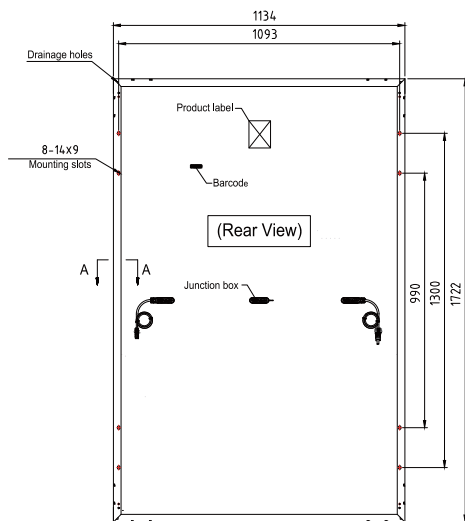
Linear power warranty **25** Years

0.55% Annual Degradation

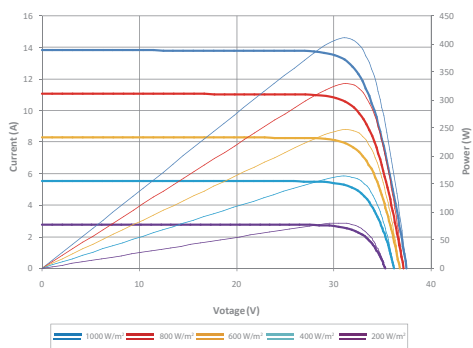
PERFORMANCE WARRANTY



DIMENSIONS OF PV MODULE(mm)



Current-Voltage & Power-Voltage Curve(405W)



ELECTRICAL DATA (STC)

Parameter	390W	395W	400W	405W
Maximum Power (P _{max})	390W	395W	400W	405W
Power Tolerance-P _{MAX} (W)	0 ~ +5W			
Maximum Power Voltage (V _{mp})	30.76V	30.98V	31.18V	31.38V
Maximum Power Current (I _{mp})	12.69A	12.76A	12.83A	12.91A
Open Circuit Voltage (V _{oc})	36.62V	36.84V	37.04V	37.24V
Short Circuit Current (I _{sc})	13.59A	13.66A	13.73A	13.81A
Module Efficiency η_m (%)	19.9%	20.2%	20.5%	20.7%

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

ELECTRICAL DATA (NMOT)

Parameter	294W	299W	302W	306W
Maximum Power (P _{max})	294W	299W	302W	306W
Maximum Power Voltage (V _{mp})	28.4V	28.6V	28.8V	29.0V
Maximum Power Current (I _{mp})	10.38A	10.44A	10.50A	10.56A
Open Circuit Voltage (V _{oc})	34.4V	34.6V	34.8V	35.0V
Short Circuit Current (I _{sc})	10.93A	10.98A	11.04A	11.10A

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

MECHANICAL DATA

Solar Cells	Monocrystalline silicon 182mm
No. of cells	108 cells (6x18)
Module Dimensions	1722 × 1134 × 30 mm
Weight	21.5 kg
Glass	High Transmission, AR Coated fully tempered Glass
Encapsulant Material	EVA
Frame	Anodized Aluminium Alloy
J-Box	IP 68 rated (3 bypass diodes)
Backsheet	Black
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}	-0.304%/°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	25A

WARRANTY

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

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Pieces per pallet	36
Pallets per container	26
Pieces per container 40'HC	936
Packaging box dimensions	1770x1140x1270mm
Packaging box weight	813kg