Mono Bifacial

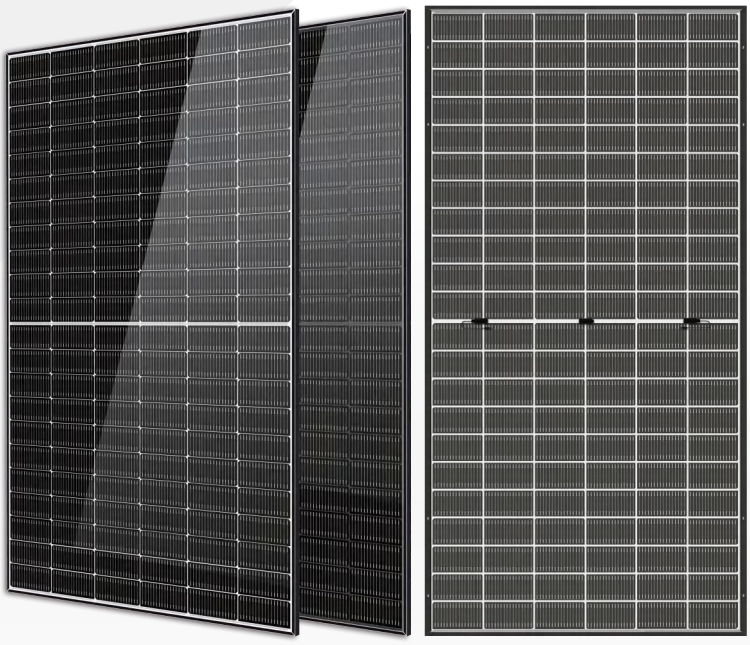
HORAY

Solar Ocean

570–590 Watt N–Type

MONO–BIFACIAL MODULE

- IEC61215: 2021
  IEC61730: 2023
  TUV Rheinland Standard
- Lloyd'S Ariel Re
  Solar Performance Insurance
- ISO9001: 2015
  Quality Management System
- ISO14001:
  Environmental Management System
- CE: Europe Standard
- Inmetro Certificate
- Japan JP-AC
- China Quality Certification Centre
  Solar product certification



KEY FEATURES

SMBB Cell
More uniform current collection capability, reducing the current heat loss of the internal cells.

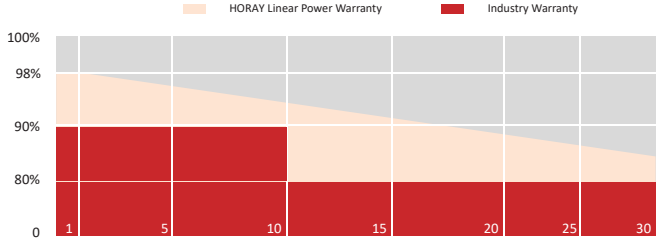
Low Light Features
Higher performance under low light environment.

Higher Output Power
The output power of 132 half-cells Monocrystalline modules is up to 590W.

LID Free
N-type solar cell has no LID naturally which can increase power generation.

Harsh Environmental Adaptability
Strict salt spray and ammonia corrosion test by the third party.

Load Capacity
Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa.



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HORAY

SPECIFICATIONS

Weight	31.5kg
Dimension	2264mm*1134mm*30mm
Cell Dimension	182*99.5mm
Cell Amount	66*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Type of the front glass	2.0mm Coated ultra clear glass
Type of the back glass	2.0mm Heat-strengthened glass
Frame	Aluminum Alloy
Cable	4mm²,+300,-300mm;Length can be customized
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Module Type	HS570TC-MHD-D	HS575TC-MHD-D	HS580TC-MHD-D	HS585TC-MHD-D	HS590TC-MHD-D
Power	570W	575W	580W	585W	590W
Open Circuit Voltage	47.55V	47.76V	47.98V	48.05V	48.08V
Short Circuit Current	15.0A5	15.11A	15.18A	15.29A	15.41A
Maximum Power Voltage	40.33V	40.52V	40.70V	40.76V	40.79V
Maximum Power Current	14.13A	14.19A	14.25A	14.35A	14.47A
Module Efficiency	22.20%	22.40%	22.59%	22.79%	22.98%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/㎡, spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT BNPI

Power	627W	633W	638W	644W	649W
Open Circuit Voltage	47.55V	47.76V	47.98V	48.05V	48.08V
Short Circuit Current	16.56A	16.63A	16.69A	16.82A	16.95A
Maximum Power Voltage	40.33V	40.52V	40.70V	40.76V	40.79V
Maximum Power Current	15.55A	15.61A	15.68A	15.79A	15.91A

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

ELECTRICAL PARAMETERS AT NMOT

Power	434W	438W	442W	446W	450W
Open Circuit Voltage	47.55V	47.76V	47.98V	48.05V	48.08V
Short Circuit Current	11.47A	11.52A	11.56A	11.65A	11.74A
Maximum Power Voltage	40.33V	40.52V	40.70V	40.76V	40.79V
Maximum Power Current	10.77A	10.81A	10.86A	10.94A	11.02A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/㎡, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

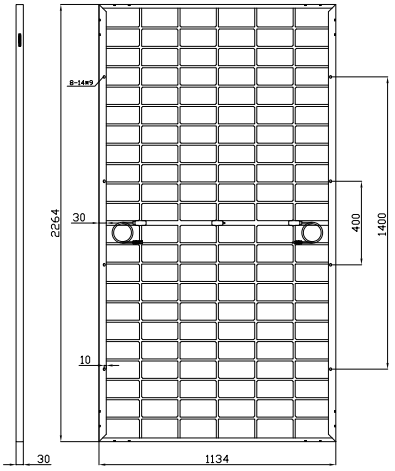
TEMPERATURE CHARACTERISTICS

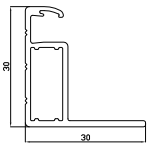
NMOT	45±2°C
Temp Coefficient of ISC	+0.04%/°C
Temp Coefficient of VOC	-0.23%/°C
Temp Coefficient of Pmax	-0.28%/°C

PACKING CONFIGURATION

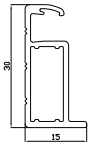
Modules/Pallet	37 Pieces
Packaging Description	20 Pallets, Total=(37+37)x10=740 Pieces
Modules/40'Container	740 Pieces

MECHANICAL DIAGRAMS





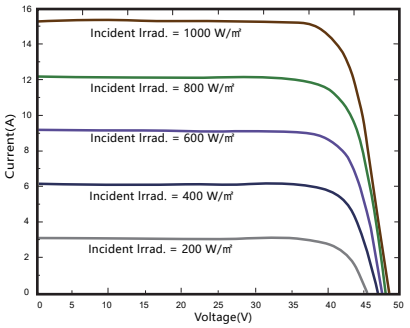
Section diagram of long frame profile

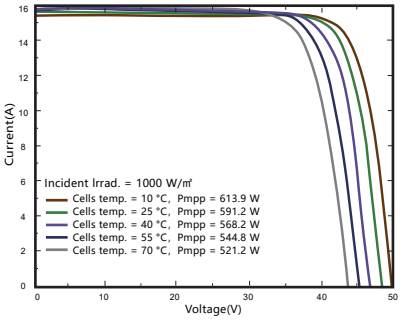


Section diagram of short frame profile

CHARACTERISTICS

HS590TC-MHD-D





MAXIMUM RATING

Power selection	0~+5W
Measuring uncertainty of Pm	0~±3%
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	30A

15 YEARS Quality Warranty

30 YEARS Power Warranty

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

Version number: MHC_D_EN_2024_A