

Mono

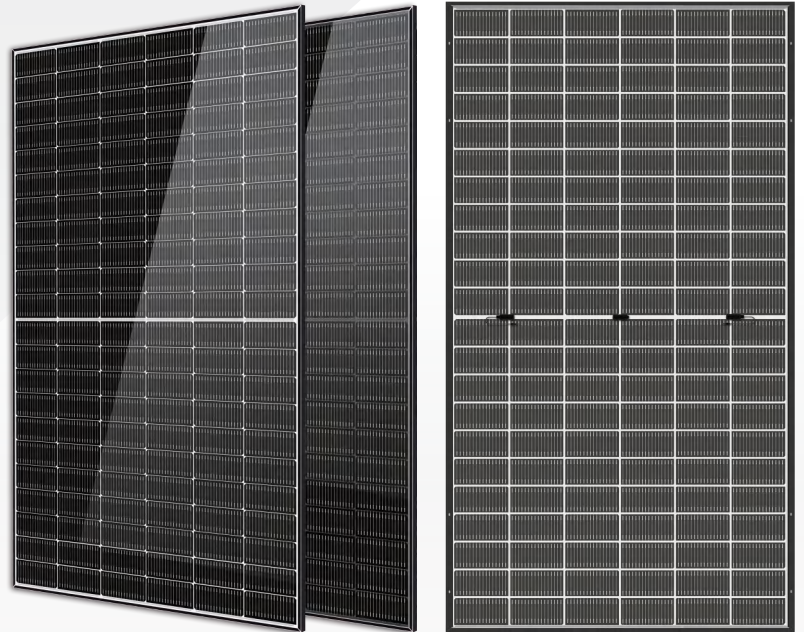
Bifacial

HORAY

Solar Ocean

520-540 Watt N-Type MONO-BIFACIAL MODULE

- IEC61215: 2021
- IEC61730: 2016
- 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



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 540W.



LID Free

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



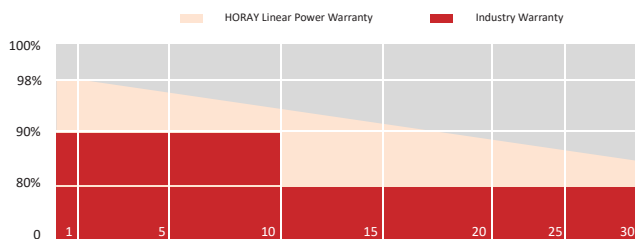
Harsh Environmental Adaptability

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.



HEADQUARTER: HORAY SOLAR CO., LTD.

GLOBAL MARKETING AND SERVICE: HORAY SOLAR GMBH

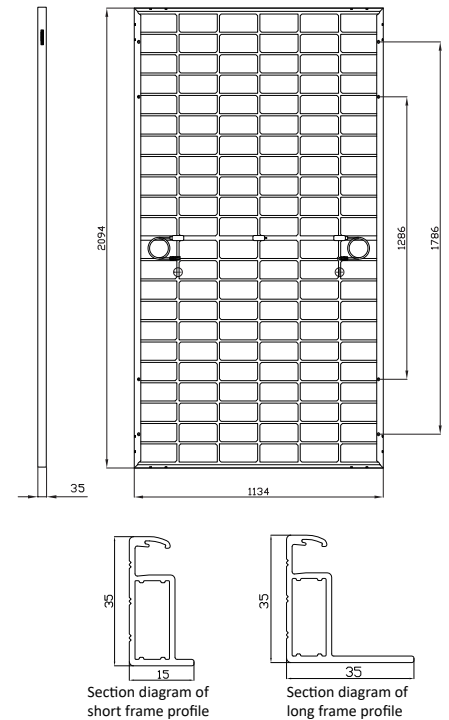
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SPECIFICATIONS

Weight	29.0kg
Dimension	2094mm*1134mm*35mm
Cell Dimension	182*91mm
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	4mm ² ,+300,-300mm/±1200mm Length can be customized
Connector	MC4 compatible
Application Level	Class A

MECHANICAL DIAGRAMS



ELECTRICAL PARAMETERS AT STC

Module Type	HS520TC-MHO-D	HS525TC-MHO-D	HS530TC-MHO-D	HS535TC-MHO-D	HS540TC-MHO-D
Power	520W	525W	530W	535W	540W
Open Circuit Voltage	47.33V	47.57V	47.81V	48.04V	48.27V
Short Circuit Current	14.10A	14.16A	14.22A	14.29A	14.35
Maximum Power Voltage	39.84V	40.04V	40.24V	40.44V	40.64V
Maximum Power Current	13.05A	13.11A	13.17A	13.23A	13.29A
Module Efficiency	21.90%	22.11%	22.32%	22.53%	22.74%

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

ELECTRICAL PARAMETERS AT BNPI

Power	573W	578W	584W	589W	595W
Open Circuit Voltage	47.51V	47.70V	48.06V	48.22V	48.43V
Short Circuit Current	15.51A	15.58A	15.64A	15.72A	15.78A
Maximum Power Voltage	39.01V	39.22V	39.45V	39.63V	39.81V
Maximum Power Current	14.69A	14.75A	14.83A	14.89A	14.96A

*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	396W	400W	401W	408W	412W
Open Circuit Voltage	44.81V	45.02V	45.22V	45.53V	45.81V
Short Circuit Current	11.39A	11.44A	11.49A	11.54A	11.59A
Maximum Power Voltage	36.91V	37.11V	37.33V	37.62V	37.74V
Maximum Power Current	10.71A	10.76A	10.81A	10.86A	10.92A

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

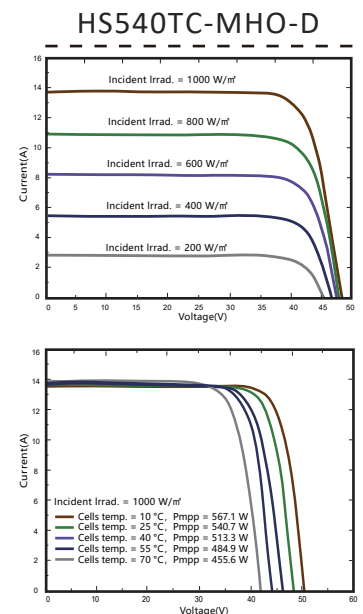
TEMPERATURE CHARACTERISTICS

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	31 Pieces
Packaging Description	22 Pallets, Total=(31+31)x11=682 Pieces
Modules/40' Container	682 Pieces

CHARACTERISTICS



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	25A

30 YEARS Quality Warranty

30 YEARS Power Warranty

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

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Version number: TC_MHO_D_EN_2024_A