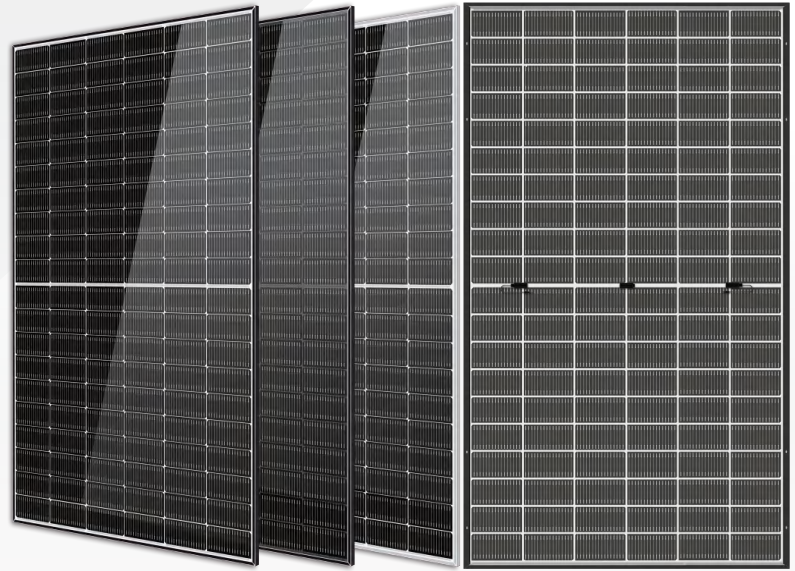


Solar Ocean

500–520 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 120 half-cells Monocrystalline modules is up to 520W.



LID Free

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



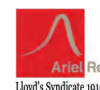
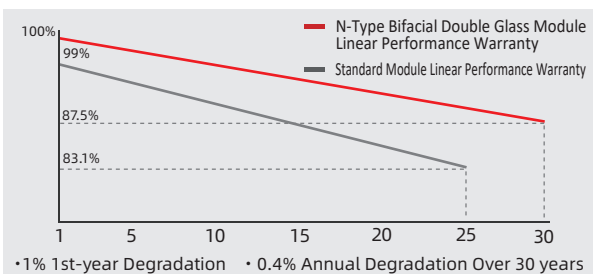
Harsh Environmental Adaptability

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.



SPECIFICATIONS

Weight	28kg
Dimension	1994mm*1134mm*30mm
Cell Dimension	182.2*95.8mm
Cell Amount	60*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;Length can be customized
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Module Type	HS500TC-MHB-D	HS505TC-MHB-D	HS510TC-MHB-D	HS515TC-MHB-D	HS520TC-MHB-D
Power	500W	505W	510W	515W	520W
Open Circuit Voltage	43.23V	43.42V	43.62V	43.68V	44.01V
Short Circuit Current	14.52A	14.60A	14.68A	14.80A	14.83A
Maximum Power Voltage	36.67V	36.83V	37.00V	37.05V	37.33V
Maximum Power Current	13.64A	13.71A	13.78A	13.90A	13.93A
Module Efficiency	22.11%	22.33%	22.55%	22.78%	23.00%

* 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	550W	556W	561W	567W	572W
Open Circuit Voltage	43.23V	43.42V	43.62V	43.68V	44.01V
Short Circuit Current	15.97A	16.06A	16.15A	16.28A	16.32A
Maximum Power Voltage	36.67V	36.83V	37.00V	37.05V	37.33V
Maximum Power Current	15.00A	15.08A	15.16A	15.29A	15.32A

*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	419W	423W	427W	432W	436W
Open Circuit Voltage	43.23V	43.42V	43.62V	43.68V	44.01V
Short Circuit Current	11.07A	11.13A	11.19A	11.28A	11.30A
Maximum Power Voltage	36.67V	36.83V	37.00V	37.05V	37.33V
Maximum Power Current	10.39A	10.45A	10.50A	10.59A	10.61A

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

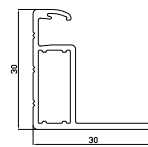
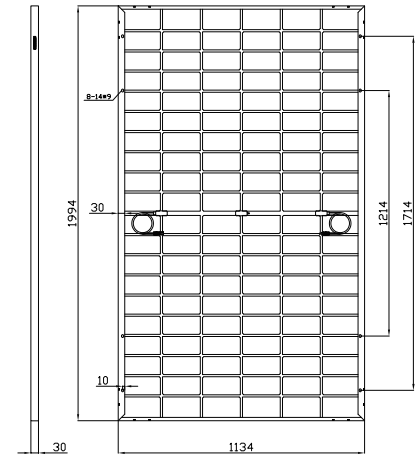
TEMPERATURE CHARACTERISTICS

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

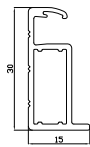
PACKING CONFIGURATION

Modules/Pallet	37 Pieces
Packaging Description	22 Pallets, Total=(37+37)x11=814 Pieces
Modules/40' Container	814 Pieces

MECHANICAL DIAGRAMS



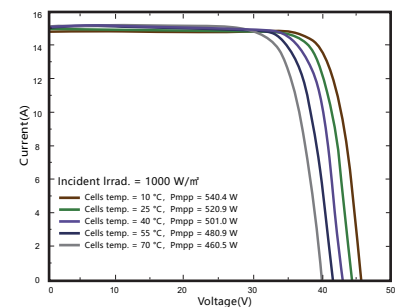
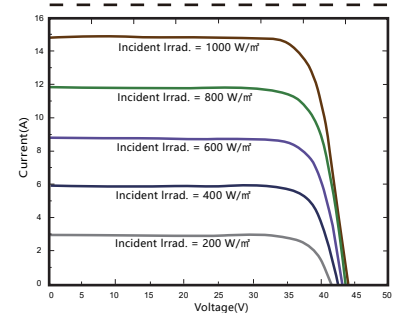
Section diagram of long frame profile



Section diagram of short frame profile

IV CHARACTERISTICS

HS520TC-MHB-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.

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Version number: MHB_D_EN_2024_A