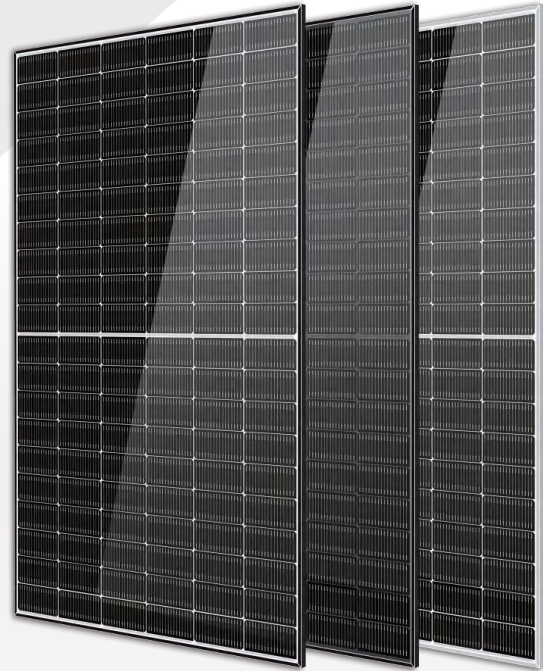


Solar Ocean

495–515 Watt N-Type MONO-FACIAL 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 515W.



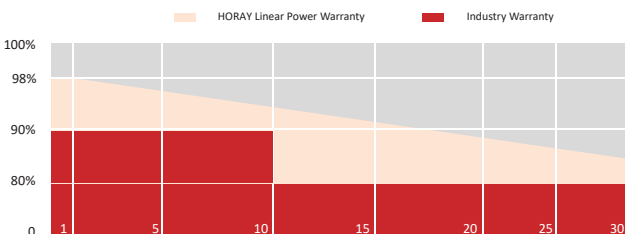
LID Free
N-type solar cell has no LID naturally which can increase power generation.



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.



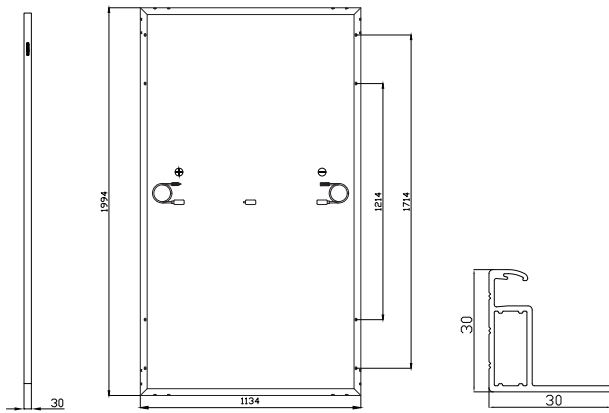
HEADQUARTER: HORAY SOLAR CO., LTD.

GLOBAL MARKETING AND SERVICE: HORAY SOLAR GMBH

✉ sales@horaysolar.com 🌐 www.horaysolar.com ☎ +86-510 83580688
📍 NO.30-5, East Yanxin Road, Huishan District, Wuxi 214177 Jiangsu P.R China

✉ info@horaysolar.com 🌐 www.horaysolar.com
📍 Robert-Bosch-StraBe 27-29,63225 Langen , Germany

MECHANICAL DIAGRAMS



SPECIFICATIONS

Weight	25kg
Dimension	1994mm*1134mm*30mm
Cell Dimension	182.2*95.8mm
Cell Amount	60*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
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	HS495TC-MHB	HS500TC-MHB	HS505TC-MHB	HS510TC-MHB	HS515TC-MHB
Power	495W	500W	505W	510W	515W
Open Circuit Voltage	43.03V	43.23V	43.42V	43.62V	43.68V
Short Circuit Current	14.44A	14.52A	14.60A	14.68A	14.80A
Maximum Power Voltage	36.50V	36.67V	36.83V	37.00V	37.05V
Maximum Power Current	13.56A	13.64A	13.71A	13.78A	13.90A
Module Efficiency	21.89%	22.11%	22.33%	22.55%	22.78%

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

ELECTRICAL PARAMETERS AT NMOT

Power	415W	419W	423W	427W	432W
Open Circuit Voltage	43.03V	43.23V	43.42V	43.62V	43.68V
Short Circuit Current	11.01A	11.07A	11.13A	11.19A	11.28A
Maximum Power Voltage	36.50V	36.67V	36.83V	37.00V	37.05V
Maximum Power Current	10.33A	10.39A	10.45A	10.50A	10.59A

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

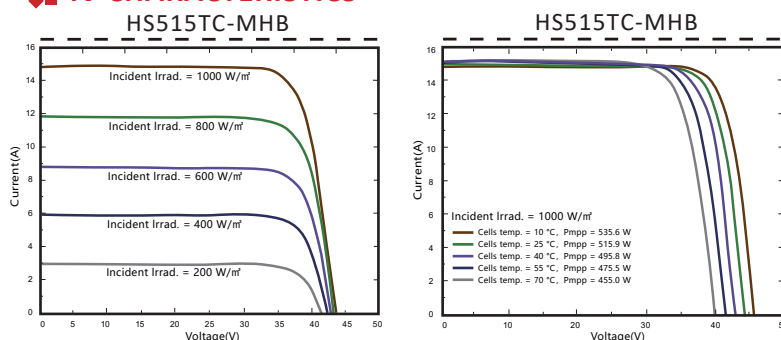
TEMPERATURE CHARACTERISTICS

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	Modules/40' Container	888 Pieces
Packaging Description	24 Pallets, Total=(37+37)x12=888 Pieces		

IV CHARACTERISTICS



MAXIMUM RATING

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

12 YEARS Quality Warranty

30 YEARS Power Warranty

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

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