Mono Bifacial

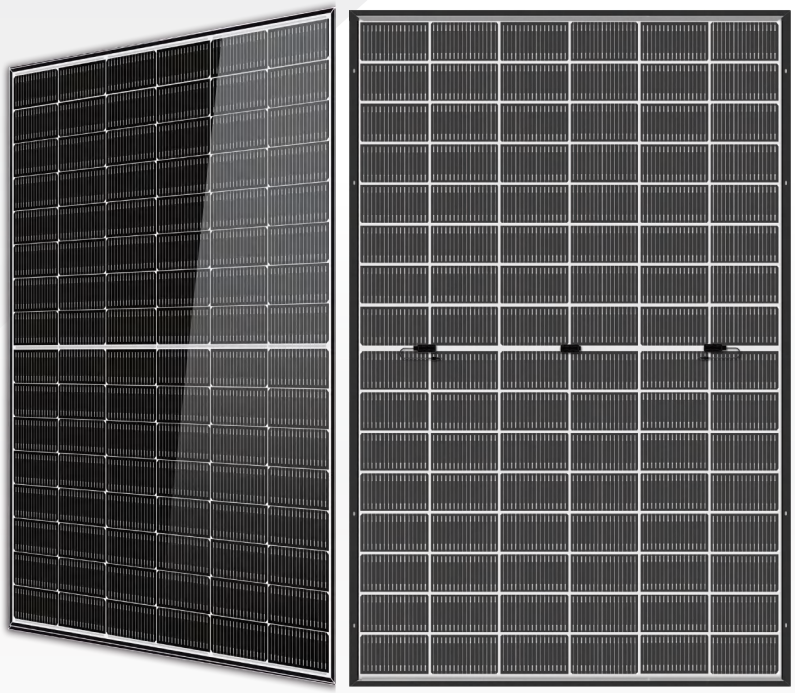
HORAY

Solar Galaxy

435–455 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.

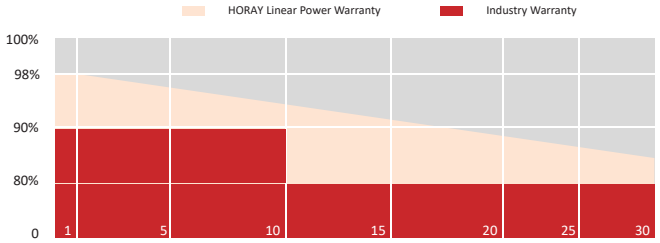
Low Light Features
Higher performance under low light environment.

Higher Output Power
The output power of 96 half-cells Monocrystalline modules is up to 455W.

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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SPECIFICATIONS

Weight	24.5kg
Dimension	1762mm*1134mm*30mm
Cell Dimension	182*105mm
Cell Amount	48*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	HS435TC-MHC-D	HS440TC-MHC-D	HS445TC-MHC-D	HS450TC-MHC-D	HS455TC-MHC-D
Power	435W	440W	445W	450W	455W
Open Circuit Voltage	35.52V	35.69V	35.87V	36.04V	36.21V
Short Circuit Current	15.56A	15.66A	15.77A	15.87A	15.97A
Maximum Power Voltage	29.52V	29.66V	29.81V	29.95V	30.10V
Maximum Power Current	14.74A	14.83A	14.93A	15.02A	15.12A
Module Efficiency	21.77%	22.02%	22.27%	22.52%	22.77%

* 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	479W	484W	490W	495W	501W
Open Circuit Voltage	35.52V	35.69V	35.87V	36.04V	36.21V
Short Circuit Current	17.27A	17.39A	17.50A	17.61A	17.72A
Maximum Power Voltage	29.52V	29.66V	29.81V	29.95V	30.10V
Maximum Power Current	16.21A	16.32A	16.42A	16.53A	16.63A

*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	331W	335W	339W	343W	347W
Open Circuit Voltage	33.74V	33.91V	34.07V	34.24V	34.40V
Short Circuit Current	12.57A	12.65A	12.73A	12.81A	12.89A
Maximum Power Voltage	27.49V	27.63V	27.76V	27.89V	28.03V
Maximum Power Current	12.06A	12.14A	12.22A	12.29A	12.37A

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

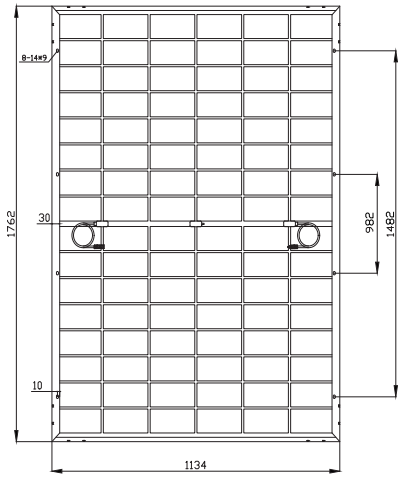
TEMPERATURE CHARACTERISTICS

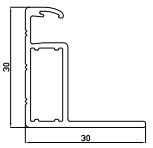
NMOT	45±2°C
Temp Coefficient of ISC	+0.04%/°C
Temp Coefficient of VOC	-0.23%/°C
Temp Coefficient of Pmax	-0.28%/°C

PACKING CONFIGURATION

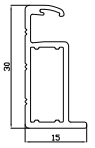
Modules/Pallet	37 Pieces
Packaging Description	26 Pallets, Total=(37+37)x13=962 Pieces
Modules/40'Container	962 Pieces

MECHANICAL DIAGRAMS





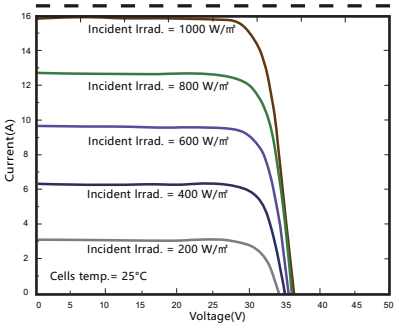
Section diagram of long frame profile

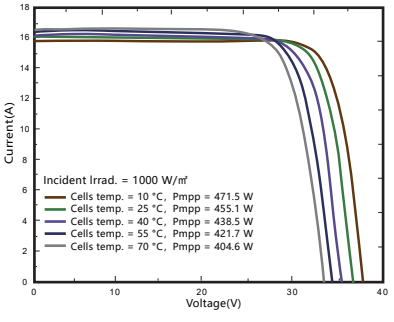


Section diagram of short frame profile

CHARACTERISTICS

HS455TC-MHC-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