

Mono

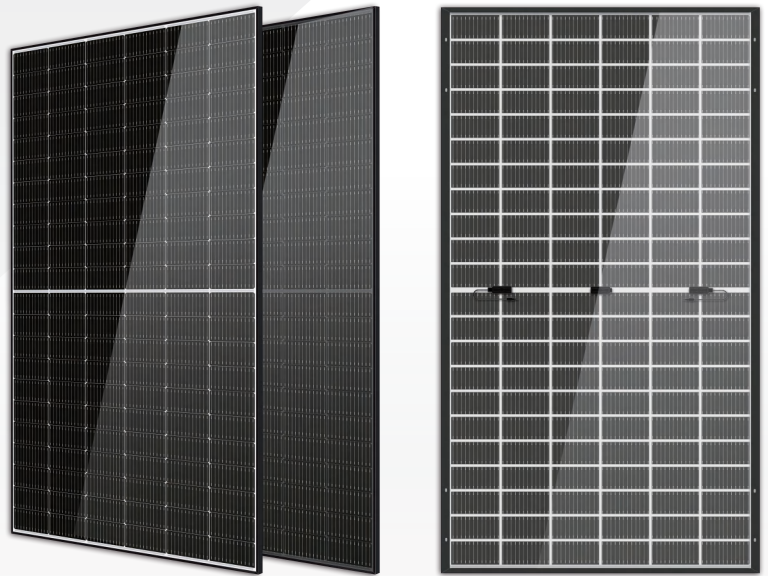
Bifacial

# HORAY

## Solar Galaxy

### 685–710 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 710W.



##### LID Free

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



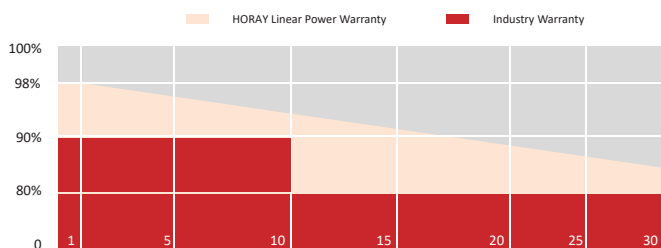
##### Harsh Environmental Adaptability

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	38.5kg
Dimension	2384mm*1303mm*35mm
Cell Dimension	210*105mm
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 <sup>2</sup> ,+300,-300mm/±1300mm Length can be customized
Connector	MC4 compatible
Application Level	Class A

## ELECTRICAL PARAMETERS AT STC

Module Type	HS685TC-MHG-D	HS690TC-MHG-D	H695TC-MHG-D	HS700TC-MHG-D	HS705TC-MHG-D	HS710TC-MHG-D
Power	685W	690W	695W	700W	705W	710W
Open Circuit Voltage	47.7V	47.9V	48.3V	48.6V	48.8V	49.0V
Short Circuit Current	18.21A	18.25A	18.28A	18.32A	18.36A	18.40A
Maximum Power Voltage	39.8V	40.1V	40.3V	40.5V	40.7V	40.9V
Maximum Power Current	17.19A	17.23A	17.25A	17.29A	17.33A	17.36A
Module Efficiency	22.1%	22.2%	22.4%	22.5%	22.7%	22.9%

\* Under Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

## ELECTRICAL PARAMETERS AT BNPI

Power	754W	759W	765W	770W	776W	781W
Open Circuit Voltage	47.7V	47.9V	48.3V	48.6V	48.9V	49.2V
Short Circuit Current	20.03A	20.08A	20.11A	20.15A	20.18A	20.21A
Maximum Power Voltage	39.8V	40.1V	40.3V	40.5V	40.8V	41.1V
Maximum Power Current	18.91A	18.95A	18.98A	19.02A	19.05A	19.08A

\*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	521W	526W	530W	534W	538W	542W
Open Circuit Voltage	45.2V	45.4V	45.8V	46.0V	46.2V	46.4V
Short Circuit Current	14.67A	14.71A	14.73A	14.76A	14.80A	14.83A
Maximum Power Voltage	37.3V	37.7V	37.8V	38.0V	38.2V	38.4V
Maximum Power Current	13.94A	13.96A	14.02A	14.05A	14.08A	14.12A

\* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

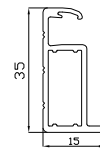
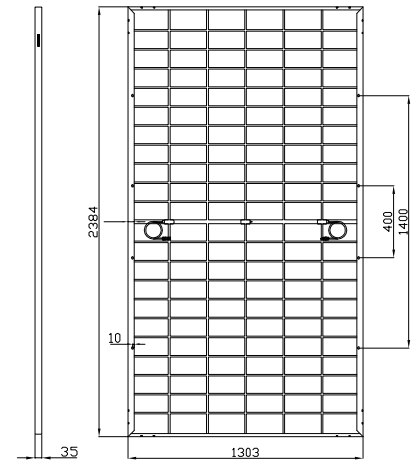
## TEMPERATURE CHARACTERISTICS

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

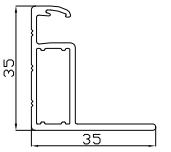
## PACKING CONFIGURATION

Modules/Pallet	31 Pieces
Packaging Description	18 Pallets, Total=(31+31)x9=558 Pieces
Modules/40' Container	558 Pieces

## MECHANICAL DIAGRAMS

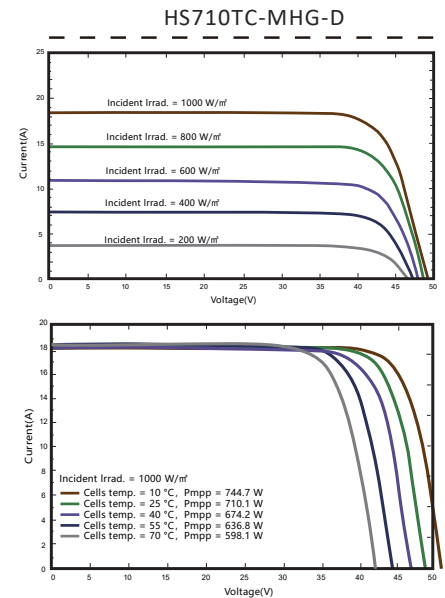


Section diagram of short frame profile



Section diagram of long frame profile

## IV 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	30A



Quality  
Warranty



Power  
Warranty

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

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