

Mono

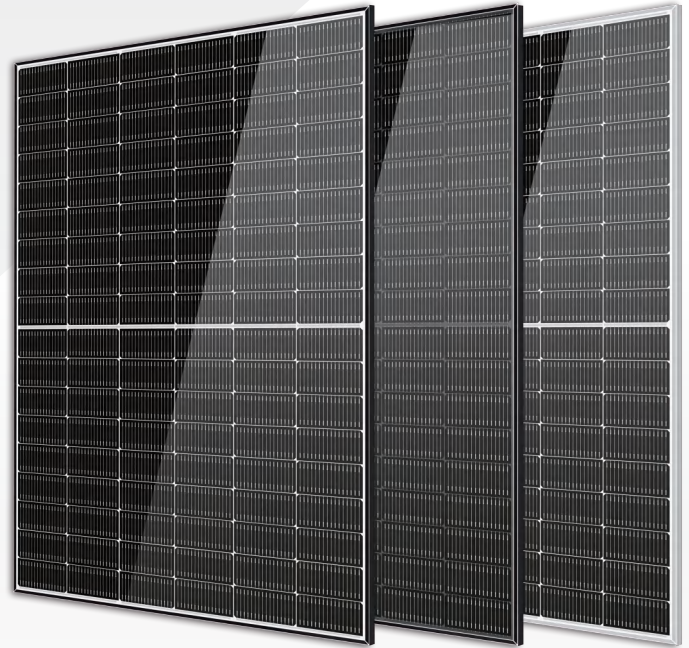
Bifacial

# HORAY

## Solar Ocean

### 420–435 Watt TOPCon MONO-FACIAL 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 108 half-cells Monocrystalline modules is up to 435W.



##### PID Protection

Ensure the attenuation probability caused by PID phenomenon is minimized.



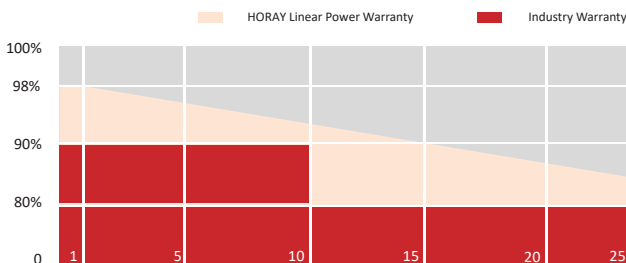
##### Harsh Environmental Adaptability

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.



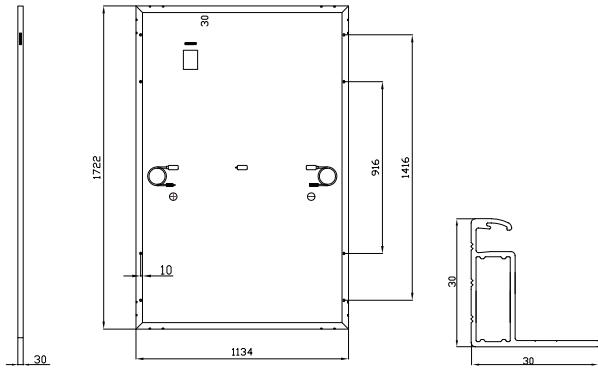
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## MECHANICAL DIAGRAMS



## SPECIFICATIONS

Weight	20.5kg
Dimension	1722mm*1134mm*30mm
Cell Dimension	182*91mm
Cell Amount	54*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Cable	4mm <sup>2</sup> , +300,-300mm/±1100mm Length can be customized
Connector	MC4 compatible
Application Level	Class A

## ELECTRICAL PARAMETERS AT STC

Module Type	HS420TC-MHO	HS425TC-MHO	HS430TC-MHO	HS435TC-MHO
Power	420W	425W	430W	435W
Open Circuit Voltage	38.11V	38.36V	38.70V	39.01V
Short Circuit Current	13.36A	13.42A	13.46A	13.52A
Maximum Power Voltage	33.14V	33.36V	33.65V	33.92V
Maximum Power Current	12.68A	12.74A	12.78A	12.83A
Module Efficiency	21.51%	21.76%	22.02%	22.28%

\* 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 NMOT

Power	336W	340W	344W	348W
Open Circuit Voltage	37.75V	38.04V	38.37V	38.67V
Short Circuit Current	10.69A	10.74A	10.77A	10.82A
Maximum Power Voltage	33.11V	33.37V	33.66V	33.92V
Maximum Power Current	10.15A	10.19A	10.22A	10.26A
Module Efficiency	17.21%	17.41%	17.62%	17.82%

\* 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.

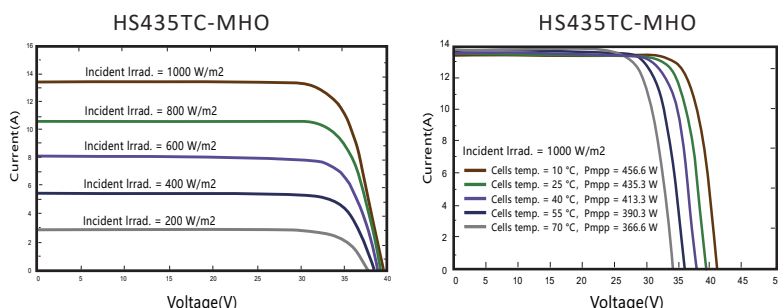
## TEMPERATURE CHARACTERISTICS

NMOT	45±2°C	Temp Coefficient of ISC	+0.05%/°C
Temp Coefficient of VOC	-0.28%/°C	Temp Coefficient of Pmax	-0.34%/°C

## PACKING CONFIGURATION

Modules/Pallet	36 Pieces	Modules/40' Container	936 Pieces
Packaging Description	26 Pallets, Total=(36+36)x13=936 Pieces		

## 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	25A

**15 YEARS** Quality Warranty

**25 YEARS** Power Warranty