

# 475~495 Watt

# HORAY



## HS7-**54BNBW**-D Nova BC Bifacial Modules



### BC Technology

Relocate all electrical contacts to the rear side, eliminating front-side shading to maximize light absorption and power generation.



### Anti-Shading Technology

With anti-shading technology, complex environments are no obstacle to generating more power.



### Better Weather Adaptability

Excellent low light performance, lower temperature coefficients and power loss under high temperature.



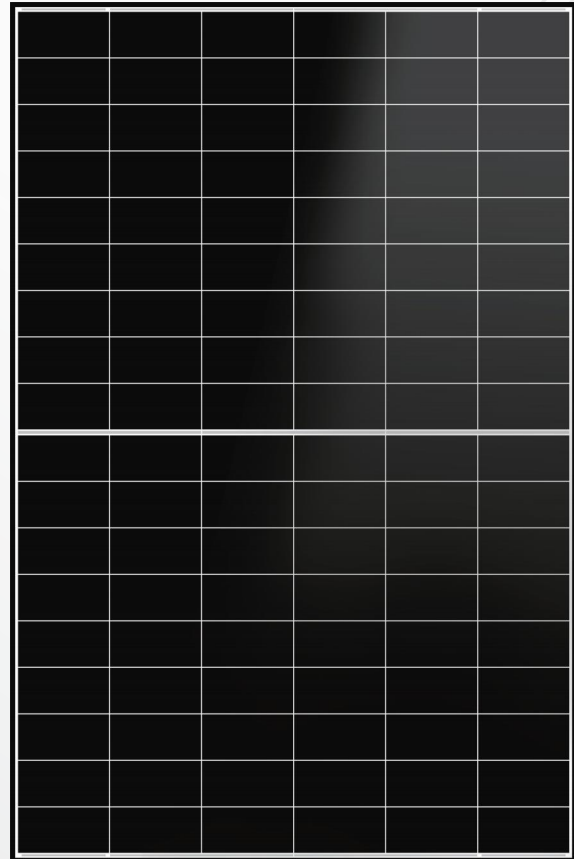
### Lower Power Attenuation

Anti PID and negligible LID/LeTID attenuation, which can reduce power loss.



### Ideal Choice For Utility Project

Lower BOS cost, lower LCOE, and improved ROI.



IEC61215:2021

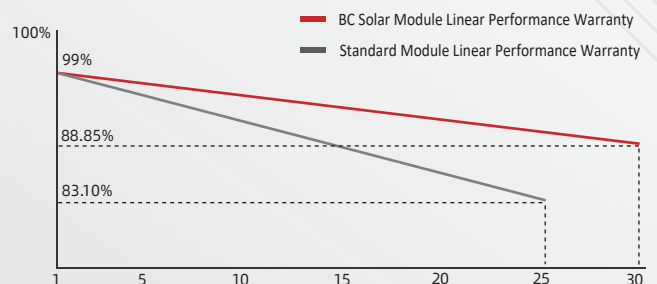
IEC61730:2023

ISO9001:2015 Quality Management System

ISO14001:2015 Environmental Management System

ISO45001:2018 Occupational Health and Safety Management System

CE: Europe Standard



15-year product warranty



30-year linear power output warranty

HEADQUARTER: HORAY SOLAR CO., LTD.

GLOBAL MARKETING AND SERVICE: HORAY SOLAR GMBH

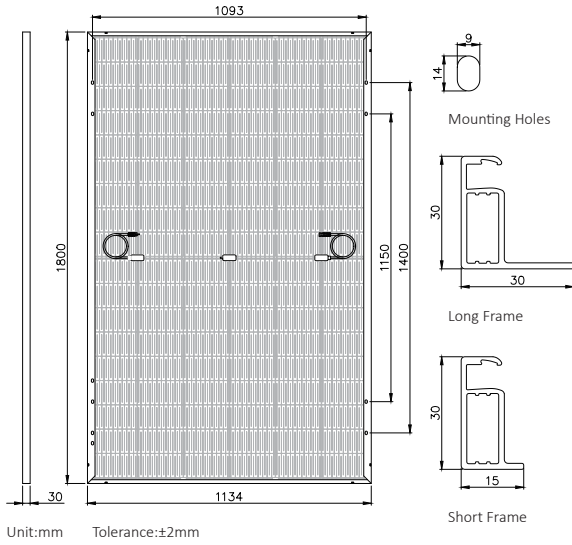
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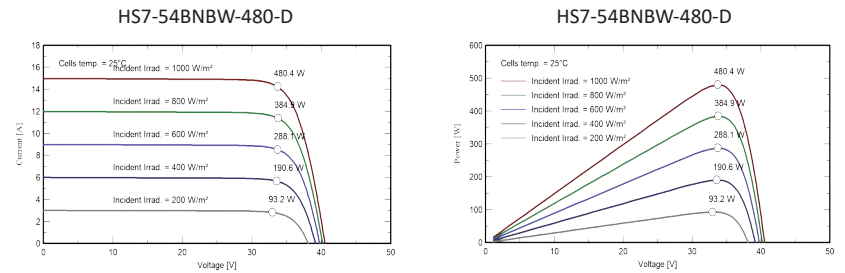
## MECHANICAL DIAGRAMS



## MECHANICAL PARAMETERS

Weight	23.5kg
Dimension	1800×1134×30mm
Cell Orientation	108(6×18)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> ,+400,-200mm/±1200mm (length can be customized)
Connector	MC4 compatible
Glass	2.0+1.6mm AR coated heat strengthened glass
Frame	Anodized aluminum alloy frame
Packaging	36pcs per pallet/864pcs per 40'HC

## CURVES OF PV MODULE



## ELECTRICAL CHARACTERISTICS

Module Type	HS7-54BNBW-475-D	HS7-54BNBW-480-D	HS7-54BNBW-485-D	HS7-54BNBW-490-D	HS7-54BNBW-495-D
Testing Condition	STC	STC	STC	STC	STC
Maximum Power(Pmax/W)	475	480	485	490	495
Open Circuit Voltage(Voc/V)	40.42	40.53	40.64	40.76	40.87
Short Circuit Current(Isc/A)	14.88	14.98	15.08	15.17	15.27
Maximum Power Voltage(Vmp/V)	33.40	33.51	33.62	33.74	33.85
Maximum Power Current(Imp/A)	14.23	14.33	14.43	14.52	14.62
Module Efficiency(%)	23.3	23.5	23.8	24.0	24.3

\* 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 CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (BASED ON 480W)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
504	40.55	15.69	33.63	14.99	5%
528	40.57	16.43	33.65	15.69	10%
552	40.59	17.16	33.67	16.39	15%
576	40.61	17.90	33.69	17.10	20%
600	40.63	18.64	33.71	17.80	25%

\*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.

## OPERATING PARAMETERS

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~3%
Maximum System Voltage	1500V
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	IEC Class C

\*The actual test value may be slightly deviated from the technical parameters due to the difference in test methods.

## MECHANICAL LOADING

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

## TEMPERATURE RATINGS (STC)

Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.20%/°C
Temperature Coefficient of Pmax	-0.26%/°C

