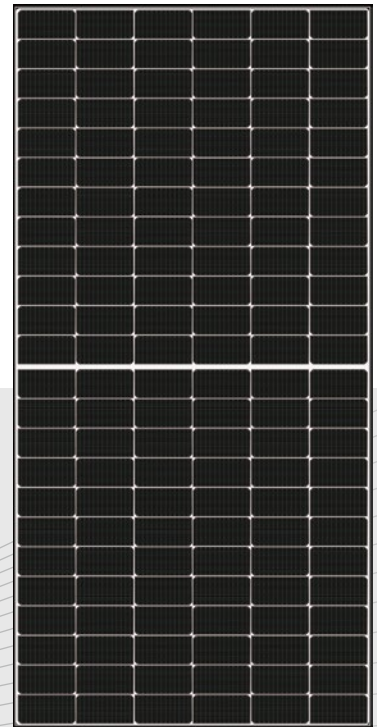




HUASUN

Bright Your Sustainable Future

HS-S144SS SERIES



455W | 460W | 465W | 470W | 475W
144-cell | HJT Mono Half Cell PV-Module Series

WARRANTY

15
years

Product
Warranty

30
years

Linear Power
Warranty

CERTIFICATES



QUALITY BENEFITS

21.85
%

Extreme Power Production

The module efficiency up to 21.85% achieved by utilizing the most advanced technology in the solar industry.



SuperMBB Half-Cut Cell Technology

Using the advanced 12BB solar cell combines with half-cut cell technology to guarantee more power.



Advanced Heterojunction cells

Combine the best of crystalline and thin-film technologies, N-type technology. With highly efficient cell architecture for high performance and special anti-reflective glass increases light transmission for higher power.



Weak light

High Energy Yield

Excellent weak light performance and better performance in hot climate. Leading temperature coefficient for more production when the sun shines strongest, Or under the cloudy, haze condition.

5,400
2,400
Pascal

Guaranteed Better Durability

Certified for snow and wind loads of a maximum of 5,400 / 2,400 Pascals and with better protection against harsh weather to improve cell life for long-lasting high power.

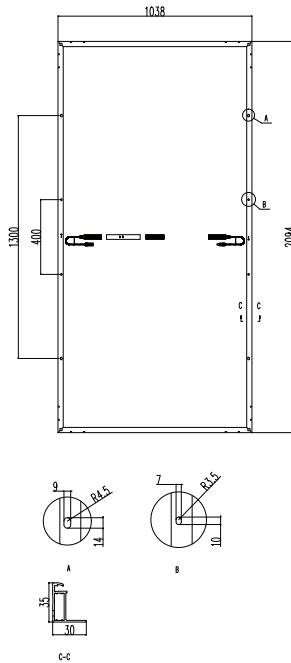


Industry Leading Output Warranty

Huasun solar cell technology result in extremely low LID and PID which supports reliability and longevity. 12% power degradation in 30 years.

The Specification and key features described in this datasheet may deviate slightly and are not guaranteed. Reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Engineering Drawings



Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 C (±2 C)
Temperature Coefficient of Pmax	-0.26 %/ C
Temperature Coefficient of Voc	-0.24 %/ C
Temperature Coefficient of Isc	0.04 %/ C

Shipping Configurations

	HC	GP
Container Length	40'	20'
Pallets Per Container	22	10
Modules Per Pallet	30pcs	30pcs
Modules Per Container	660pcs	300pcs

Certifications & Warranty

Safety	IEC61215, IEC61730
Fire Rating	Class C
Product Warranty	15 Yrs Workmanship
Performance Warranty of Pmax	30 Yrs Power Output (Linear)*

* 1st year 99%, after 2nd year 0.37% annual degradation to year 30.

Electrical Characteristics (STC)

Model Number	HS-S144 SS455	HS-S144 SS460	HS-S144 SS465	HS-S144 SS470	HS-S144 SS475
Maximum Power (Pmax)	455W	460W	465W	470W	475W
Max Module Efficiency(%)	20.93%	21.16%	21.39%	21.62%	21.85%
Voltage at Max Power (Vmp)	45.14V	45.33V	45.51V	45.68V	45.86V
Current at Max Power (Imp)	10.09A	10.16A	10.22A	10.29A	10.36A
Open Circuit Voltage (Voc)	53.21V	53.41V	53.51V	53.63V	53.69V
Short Circuit Voltage (Isc)	10.51A	10.59A	10.64A	10.73A	10.81A
Operating Module Temperature	-40 to +85 C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	25A				
Rating Power Sorting	0~+5W				

*STC: Irradiance 1000 W/m², module temperature 25 C, AM=1.5; Best in Class AAA solar simulator used, power measurement uncertainty is within +/- 3%.

NOCT	455W	460W	465W	470W	475W
Max. Power at NOCT (Pmax)	340W	343W	347W	350W	354W
Voltage Max. Power (Vmp)	41.88V	41.91V	42.09V	42.18V	42.27V
Current Max Power (Imp)	8.12A	8.19A	8.25A	8.32A	8.38A
Open Circuit Voltage (Voc)*	49.66V	49.83V	49.94V	50.05V	50.07V
Short Circuit Voltage (Isc)*	8.41A	8.49A	8.57A	8.64A	8.72A

*NOCT: 800W/m² Irradiance, 20 C ambient temperature, AM=1.5, wind speed 1m/s. Values are based on RETC certified results from a light-soaked module.

Mechanical Characteristics

Laminate Structure	Glass/ POE/ Cells/ POE/ Backsheet
Cell Type	HJT Mono 166 x 83 mm
Cell Connection	144 (72x2)
Module Dimensions	2094 x 1038 x35 mm
Weight	23.5 kg
Junction Box	Degree of protection IP67
Output Cable	4mm ² , 200mm in length, length can be customized
Connectors Type	UV Resistant Cable/Compatible MC4
Frame	Anodised Aluminum Alloy
Encapsulant	POE
Front Load*	5400 Pa
Real Load*	2400 Pa
Glass Thickness	3.2mm Anti-reflective surface, Solar glass

* Mechanical load test report per Solar PTL (IEC 61730)