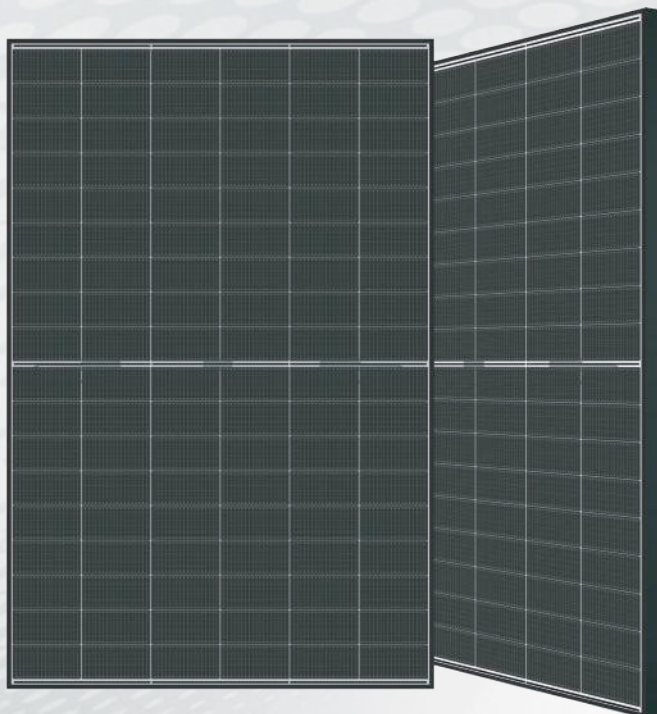


UNI H

UE465H-54HBD

HJT Bifacial Half-cell Double-glass Solar Module



HJT Technology

Shorter current transport path, better low-light performance, and higher power generation.



Up to 90% Bifaciality

Natural symmetrical bifacial structure bringing more energy yield from the backside.



Sealing with PIB

Stronger moisture resistance, greater air impermeability to extend module lifespan.



Higher reliability

Industrial leading product and performance warranty, ensuring modules' consistent outstanding performance.



Ideal Choice for Rooftop System

All-black aesthetic modules, designed for residential rooftop projects.

445-465W



Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015: ISO Environmental Management System.

ISO45001: 2018: Occupation Health and Safety.

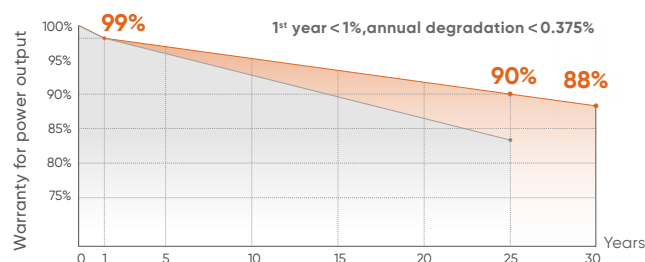
IEC62941: Guideline for module design qualification and type approval.



Quality Guarantee

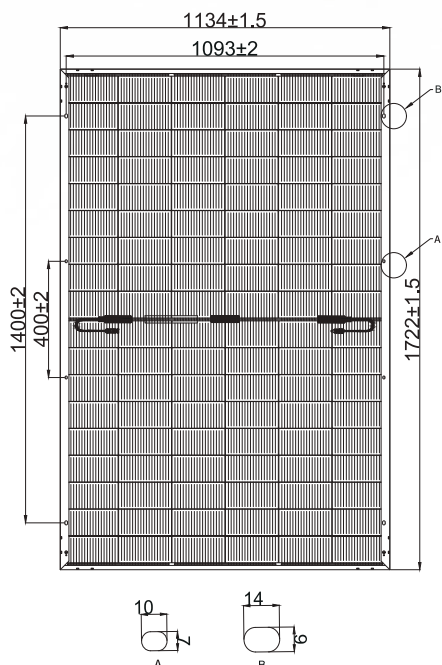
15 Year Materials Warranty

30 Year Power Warranty

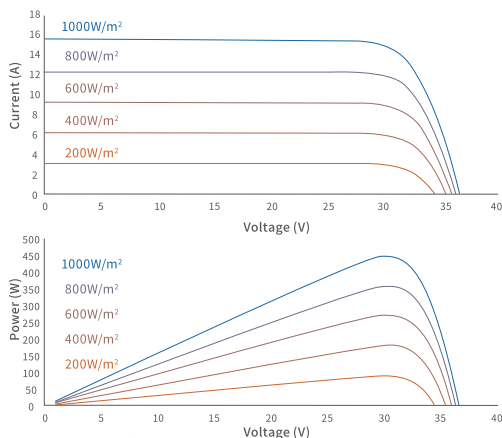


Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

Engineering Drawings



I-V Curve



Shipping Configurations

Container Size	40HQ
Pallets Per Container (pcs)	26
Modules Per Pallet (pcs)	36
Modules Per Container	936

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

Electrical Characteristics (STC*)

UE465H-54HBD	UE445	UE450	UE455	UE460	UE465
Maximum Power (Pmax)	445	450	455	460	465
Module Efficiency (%)	22.79	23.04	23.29	23.54	23.79
Optimum Operating Voltage (Vmp)	35.38	35.63	35.88	36.13	36.38
Optimum Operating Current (Imp)	12.58	12.63	12.68	12.73	12.78
Open Circuit Voltage (Voc)	42.18	42.44	42.70	42.96	43.22
Short Circuit Current (Isc)	13.10	13.15	13.20	13.25	13.30
Operating Module Temperature	-40 to +85°C				
Maximum System Voltage	DC1500V(IEC)				
Maximum Series Fuse	25A				
Power Tolerance	0~+5W				
Bifaciality	85%±5%				

STC: AM1.5, 1000W/m², 25 °C

BNPI**

Maximum Power (Pmax)	495	500	505	510	515
Optimum Operating Voltage (Vmp)	35.38	35.63	35.88	36.13	36.38
Optimum Operating Current (Imp)	14.00	14.04	14.08	14.12	14.16
Open Circuit Voltage (Voc)	42.18	42.44	42.70	42.96	43.22
Short Circuit Current (Isc)	14.57	14.61	14.65	14.69	14.73

BNPI: AM1.5, 1000W/m², 135W/m², 25 °C

NOCT**

Maximum Power (Pmax)	338	342	346	350	354
Optimum Operating Voltage (Vmp)	33.34	33.60	33.85	34.11	34.35
Optimum Operating Current (Imp)	10.14	10.18	10.22	10.26	10.30
Open Circuit Voltage (Voc)	40.26	40.50	40.75	40.99	41.34
Short Circuit Current (Isc)	10.56	10.60	10.64	10.68	10.72

NOTC: AM1.5, 800W/m², 20 °C, 1m/s.

Mechanical Characteristics

Cell Type	HJT
Cell Connection	108(6*18)
Module Dimension	1722*1134*30mm
Weight	26kg
Junction Box	IP68
Output Cable	4mm ² ; 300mm or customized; UV resistant
Connectors Type	MC4 original / MC4 compatible
Frame	Anodised aluminum alloy(Black)
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	Double glass, 2.0mm/1.6mm

Safety & Warranty

Safety Class	Class II
Product Warranty	15Years Workmanship
Performance Warranty	30Years Linear Warranty

* Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.