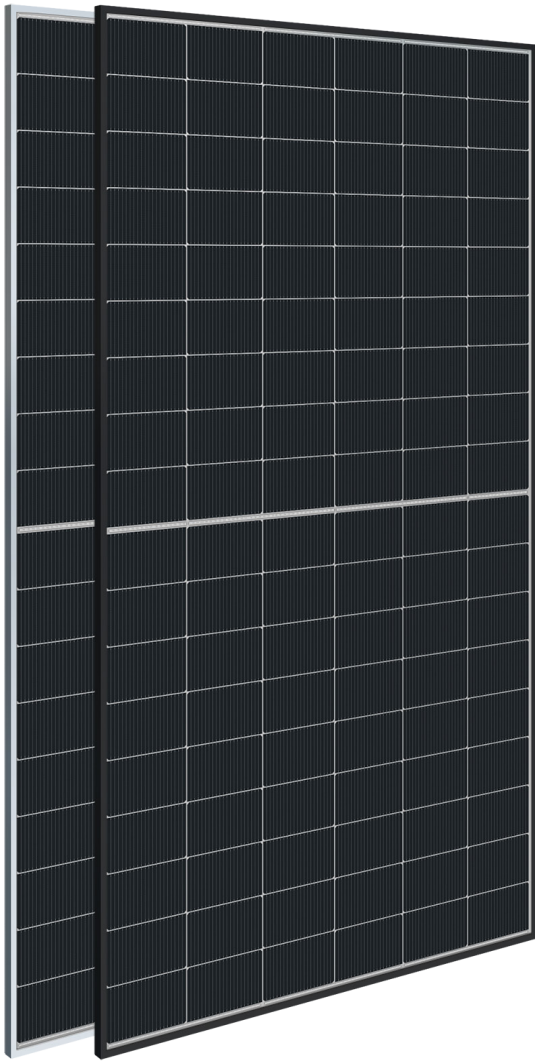




ABU-N54HL-DG

Bifacial Series

425~450W



SMBB Design

Half-cut cells brings lower cell connection loss and lower thermal coefficients to ensures higher power output



Excellent Low-light Performance

Advanced solar cell surface texturing technology allows for excellent performance in low-light environments



Highly Strengthened Design

Certified to withstand: 5400Pa snow load and 2400Pa wind load



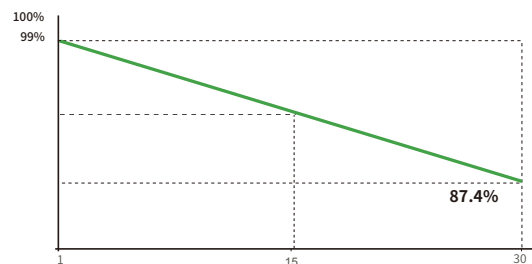
Highly Strengthened Design

Certified to withstand: 5400Pa snow load and 2400Pa wind load

Warranty

15 15-year Product Warranty

30 30-year Linear Power Warranty

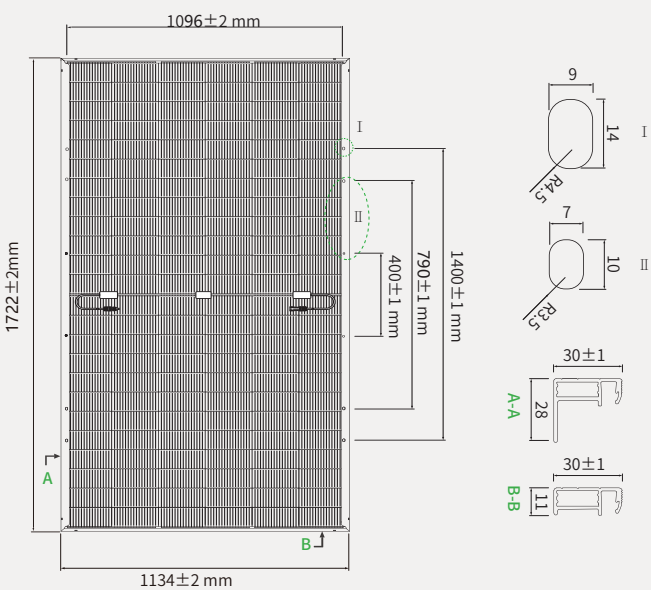


ISO9001:2015: Quality Management System
ISO14001:2015: Environmental Management System
ISO45001:2018: Occupational Health and Safety Management System

ABU-N54HL-DG 425~450W

Mechanical Specifications

Outer dimensions (L x W x H)	1722x 1134 x 30 mm
Cell type	n-type mono-crystalline
No. of cells	108
Frame	Aluminum, silver anodized
Front / Back glass	2.0+2.0 mm
Junction box	IP68 (Three junction boxes)
Cable specification	+ 300 mm, - 300 mm(4.0mm ²); Customized length
Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Module weight	24.5kg
Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	925kg
Modules per 40' HQ container	720 pcs (Subject to sales contract)



Electrical Specifications (STC)

Rated output (Pmpp / Wp)	425	430	435	440	445	450
Rated voltage (Vmpp / V)	33.21	33.39	33.57	33.75	33.92	34.10
Rated current (Impp / A)	12.80	12.88	12.96	13.04	13.12	13.20
Open circuit voltage (Voc / V)	39.34	39.60	39.88	40.14	40.40	40.70
Short circuit current (Isc / A)	13.53	13.58	13.63	13.68	13.73	13.78
Module efficiency	22.3%	22.5%	22.6%	22.8%	23.0%	23.2%
Output power tolerance	0 ~ + 3%					
Temperature coefficient (Pmpp)	-0.29%/°C					
Temperature coefficient (Voc)	-0.25%/°C					
Temperature coefficient (Isc)	+0.045%/°C					

STC: Irradiance 1000W/m², Cell Temperature 25° C, AM=1.5

Electrical Specifications (BNPI)

Rated output (Pmpp / Wp)	470	475	480	485	490	495
Rated voltage (Vmpp / V)	33.82	33.96	34.12	34.26	34.39	34.55
Rated current (Impp / A)	13.90	13.99	14.07	14.16	14.25	14.33
Open circuit voltage (Voc / V)	40.05	40.28	40.52	40.74	40.96	41.22
Short circuit current (Isc / A)	14.69	14.75	14.80	14.85	14.91	14.91

BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25° C, AM=1.5

Application Requirements

Operating Temperature	-40°C ~ +85°C
Max. system voltage (IEC/UL)	1500V _{DC}
Max. series fuse rating	30 A
Double-sided coefficient	φVoc: 98 ± 5 %, φIsc: 80 ± 5 %, φPmax: 80 ± 5 %

Curve

