## AlpenSeries A6



## **WP-XXX/A6-144H**

144-cell Bifacial Double Glass HJT Solar Module

Mono HJT Module

Power Output Range

Maximum System Voltage

Maximum Efficiency

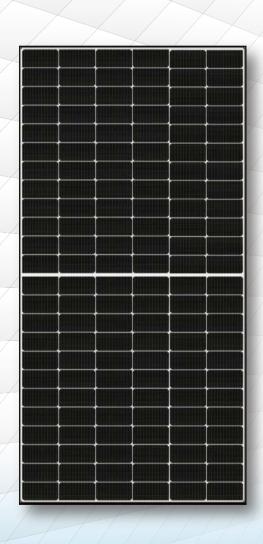
**144 CELL** 

465-480W

**1500V** 

22.1%

## **QUALITY BENEFITS**



22.1%

**Industrial Benchmark** 

Up to 22.1% efficiency for double glass module

**SMBB**  **SMBB HJT Half-Cut Technology** 

Unique 12BB HJT Cell with Half-cut design



**Aesthetical Design** 

Black but transparent outfit, elegant for any rooftop



Maximum Durability & Reliability

15/30 years warranty,long-term high performance ensured



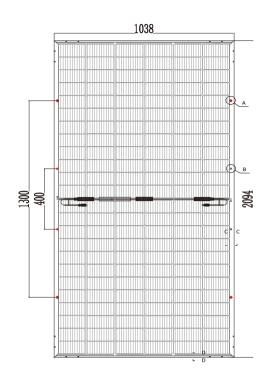




Product Warranty

Linear Power Warranty

## **Engineering Drawings**

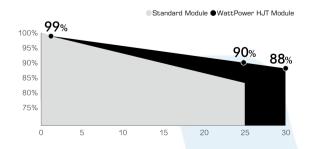


PA.S	7 13.5	e 5 30	<b>E</b>
A	В	C-C	D-D

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

Certifications & Warranty		
Safety	Class II	
Fire Rating	Class A	
Product Warranty	15 Yrs Workmanship	
Performance Warranty of Pmax	30 Yrs Linear Warranty*	

<sup>\*1</sup>st year 99%, after 2nd year 0.375% annual degradation to year 30.



Electrial Characteri	stics(STC)			
Model Number	WP-465/A6 -144H	WP-470/A6 -144H	WP-475/A6 -144H	WP-480/A6 -144H
Maximum Power (Pmax)	465W	470W	475W	480W
Max Module Efficiency(%)	21.4%	21.6%	21.9%	22.1%
Voltage at Max Power (Vmp)	45.44V	45.66V	45.86V	46.08V
Current at Max Power (Imp)	10.24A	10.30A	10.36A	10.43A
Open Circuit Voltage (Voc)	53.35V	53.48V	53.61V	53.74V
Short Circuit Current (Isc)	10.64A	10.70A	10.76A	10.82A
Operating Module Temperatur	re	-40 to +85 C		
Maximum System Voltage		DC150	OV (IEC)	
Maximum Series Fuse		2	20A	
Rating Power Sorting		0~	+5W	

<sup>\*</sup>STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Best in Class AAA solar simulator used, power measurement uncertanity is within  $\pm$ 1-3%.

NOCT	465W	470W	475W	480W
Max. Power at NOCT (Pmax)	354W	357W	361W	365W
Voltage Max. Power (Vmp)	43.37V	43.58V	43.77V	43.98V
Current Max Power (Imp)	8.15A	8.20A	8.25A	8.30A
Open Circuit Voltage (Voc)*	50.92V	51.04V	51.17V	51.29V
Short Circuit Current (Isc)*	8.58A	8.63A	8.67A	8.72A

\*NOCT:  $800W/m^2$  Iddadiance,  $20^\circ$ C ambient temperature, AM=1.5, wind speed 1m/s. Values are based on RETC certified results from a light-soaked module.

BSTC	465W	470W	475W	480W
Max. Power at NOCT (Pmax)	515W	520W	525W	530W
Voltage Max. Power (Vmp)	46.40V	46.60V	46.80V	47.00V
Current Max Power (Imp)	11.19A	11.24A	11.29A	11.34A
Open Circuit Voltage (Voc)*	54.73V	55.33V	55.93V	56.53V
Short Circuit Current (Isc)*	11.57A	11.61A	11.65A	11.69A

<sup>\*</sup>BSTC:Front side irradiation 1000W/m², back side reflection irradiation 135W/m², spectrum AM1.5, ambient temperature 25  $^{\circ}$ C.

Mechanical Characteristics			
Laminate Structure	Glass/ POE/ Cells/ POE/ Glass		
Cell Type	HJT Mono 166 x 83 mm		
Cell Connection	144 (72x2)		
Module Dimensions	2094x 1038 x 30 mm		
Weight	27.5 kg		
Junction Box	IP67 / IP68		
Output Cable	4mm², 1400mm		
Connectors Type	UV Resistant Cable/Compatible MC4		
Frame	Anodised Aluminum Alloy		
Glass Thickness (F) 2.0mm Anti-Reflective surface Solar Glass,(B) 2.0mm Solar Glass			
* Mechanical load test report per Solar PTL (IEC 61730)			

Packing Information		
Module per Pallet	36 pcs	
Module per 40' container	792 pcs	