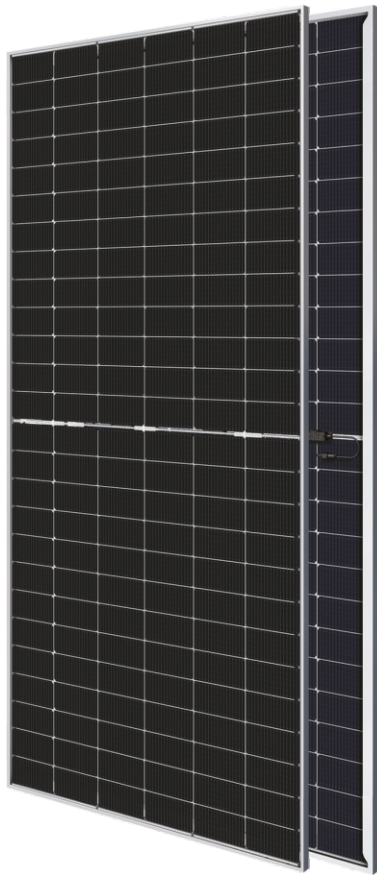




ARKA **WAVE**

AW-78-HT

620-640 Watt

Bifacial Module With **Dual** Glass

Product of **INDIA** 



N-Type Technology

N-type modules employing Tunnel Oxide Passivating Contacts (TOPCon) technology demonstrate reduced degradation from LID/LeTID and improved performance under low light conditions.



Positive Power Output

Positive power tolerance combined with current binning minimizes mismatch losses.



Anti-PID

Minimizes degradation risks from PID phenomena through optimized cell production technology and stringent material control.



Dual-Sided Power Generation

The dual-sided power generation gain is enhanced by exposing the backside to light, leading to a significant reduction in LCOE.



Mechanical Load Enhanced

Certified to withstand:
5400 Pa front side max static test load
2400 Pa rear side max static test load



SMBB Technology

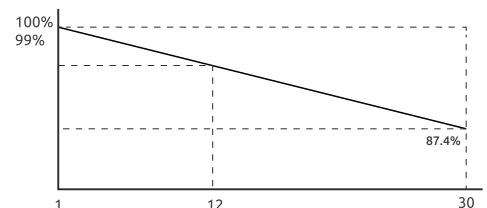
Enhanced light trapping and improved current collection to boost module power output and enhance reliability.

12 YEAR
Product
Warranty

30 YEAR
Linear Power
Warranty

1%
First-year
Degradation

0.4%
Annual Degradation
Over 30 Years



AW-78-HT 620-640 Watt

Mechanical Characteristics

Cell Type	N- type TOPCon
No. of cells	156 (78×2)
Dimensions	2465×1134×30 mm
Weight	33.8 kg
Front Glass	2.0 mm, Low Iron, Heat Strengthened, AR Coated
Back Glass	2.0 mm, Low Iron, Heat Strengthened Glass
Frame	T6 Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection class	Class II
IEC Fire Type	Class C
Output Cables	4.0 mm2 (+): 400 mm , (-): 400 mm or Customized Length

Packaging Configuration

Packaging Detail	36 pcs/pallet, 72 pcs/stack
(Two Pallets = One Stack)	576 pcs/ 40'HQ Container

Specifications(STC)

Maximum Power - Pmax (Wp)	620	625	630	635	640
Maximum Power Voltage - Vmp (V)	47.54	47.71	47.88	48.05	48.22
Maximum Power Current - Imp (A)	13.05	13.10	13.16	13.22	13.28
Open-circuit Voltage - Voc (V)	56.60	56.80	57.00	57.20	57.40
Short-circuit Current - Isc (A)	13.70	13.74	13.78	13.82	13.86
Module Efficiency STC (%)	22.20	22.40	22.50	22.70	22.90
Power Tolerance	0 ~ + 3 %				
Temperature Coefficients of Pmax	-0.28 %/°C				
Temperature Coefficients of Voc	-0.24 %/°C				
Temperature Coefficients of Isc	0.046 %/°C				

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

Specifications(NOCT)

Maximum Power - Pmax (Wp)	466	470	473	477	481
Maximum Power Voltage - Vmp (V)	44.24	44.43	44.62	44.76	44.90
Maximum Power Current - Imp (A)	10.54	10.58	10.62	10.67	10.72
Open-circuit Voltage - Voc (V)	53.77	53.96	54.15	54.34	54.53
Short-circuit Current - Isc (A)	11.06	11.09	11.13	11.16	11.19

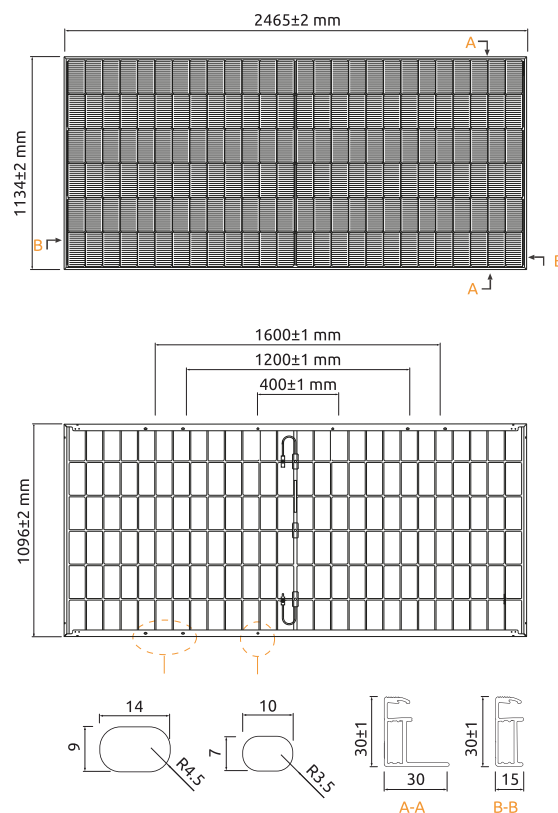
NOCT: Irradiance 800W/m2, Cell Temperature 20°C, AM=1.5, Wind speed 1m/s

Application Conditions

Operating Temperature	-40 °C ~ +85 °C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30 A
Nominal Operating Cell	45±2 °C
Refer. Bifacial Factor	80±5 %

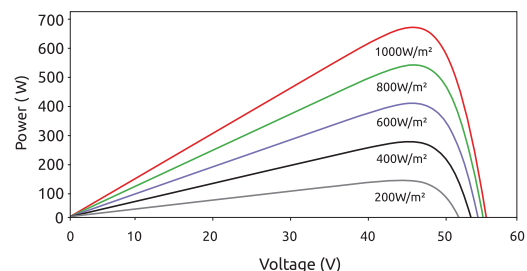
Disclaimer: Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. ARKALIGHT SOLAR PVT. LTD. reserves the right to make any adjustment to the information described here. Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.

Engineering Drawing



Electrical Performance

Power-Voltage Curves (AW-78-HT 640 W)



Current-Voltage Curves (AW-78-HT 640 W)

