Since 2006





WHALE SERIES

Dual Glass Bifacial Solar Panel 78 M10 Half Cut Cells (Mono Perc)

TYPE: ALLESUN-(600-620)-7811MBG

600W-620W 22.18% efficiency

ADVANTAGES & FEATURES

HIGH SAVING

Lower LCOE, reduced BOS cost shorter payback time

HIGH EFFICIENCY

Excellent module conversion efficiency of up to 21.28%

LOW-LIGHT PERFORMANCE

Advanced glass and cell surface textured design ensure excellent performance in low-light environment.

PID RESISTANCE

Excellent Anti-PID performance guarantees Limited power degradation for mass production

IP68 JUNCTION BOX

High waterproof level

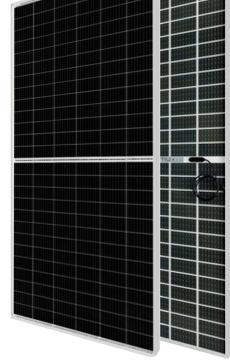
DUAL GLASS BIFACIAL

Up to 30% More Power Output than normal standard PV modules & Longer Durable Bi-Faciality Factor: 70 ± 5%



PERC AND HALF CUT CELLS

Stable and Lower Temperature coefficient.



LINEAR GRAPH



Power Degradation: < 2% For the First Year < 0.5% / Year in 2~30 Years

CERTIFICATES











Applied Quality Standard IEC 61370 UL 61730 IEC 61215 ISO 9001

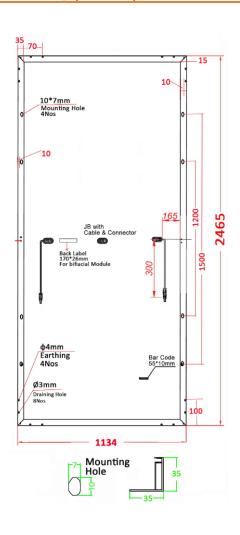
TYPE:ALLESUN-(600-620)-7811MBG

ELECTRICAL CHARACTERISTIC @STC

STC: 1000W/M ² , AM: 1.5 , 25%	С	STC NOCT				
Max. Power (Pmax)	(W)	600W 457W	605W 460W	610W 465W	615W 468W	620W 472W
Max. Power Voltage (Vmpp)	(V)	46.01 42.12	46.15 42.25	46.28 42.37	46.42 42.50	46.56 42.62
Max. Power Current (Impp)	(A)	13.04 10.85	13.11 10.90	13.18 10.96	13.25 11.02	13.32 11.08
Open Circuit Voltage (Voc)	(V)	54.12 50.35	54.28 50.50	54.44 50.65	54.60 50.80	54.77 50.95
Short Circuit Current (Isc)	(A)	13.94 11.47	14.01 11.53	14.09 11.59	14.16 11.65	14.24 11.71
Module Efficiency	(Eff%)	21.46%	21.64%	21.82%	22.00%	22.18%

^{*}STC (Standard Test Condition): Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5 *Measurement Tolerance (±3.0%)

DRAWING (IN MM)



TEMPERATURE COEFFICIENTS MAX. LIMITS

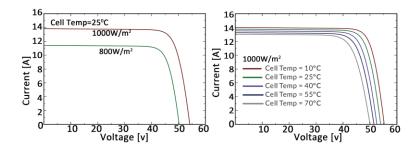
Temp Coefficients of Pm	-0.360%/°C	Max. System Voltage	1500VDC IEC
Temp Coefficients of Voc	-0.280%/°C	Operating Temp	-40°C to +85°C
Temp Coefficients of Isc	+0.05%/°C	Noct	45°C±2 °C

MECHANICAL CHARACTERISTICS

Cell Technology and size	Mono Perc 10BB, 182mmx91mm			
Number of Cells (pcs)	156 Pcs Half Cut of M10 (78*2)			
Dimensions	2465x1134x35mm			
Glass / Front Cover	3.2mm, High Light Transmission AR coated Safe Glass			
Encapsulation	0.55mm,PID free EVA film, UV CUT & UV THROUGH			
Rear Cover	2.0mm safety glass, High Light Transmission			
Weight	34.5 kgs			
Frame	Anodized Aluminum Alloy, Silver Color			
Junction Box	IP68 Certified,3 Bypass diodes, split junction box			
Cables & Connectors	4mm² 12AWG, Length 300mm, MC4 compatible Connectors			
Allowable Hail Load	227g steel ball dropped from 1m height			
Surface Load	Snow Load 5400pa, Wind Load 2400pa			
Series Fuse Rating: 30A	Application Class: A Fire Rating Class: C			

PACKAGING CONFIGURATION

IV CURVES





^{*}NOCT (Nominal Module Operating Temperature): Irradiance 800W/ m2, Ambient Temperature 20°C, Wind Speed 1m/s.