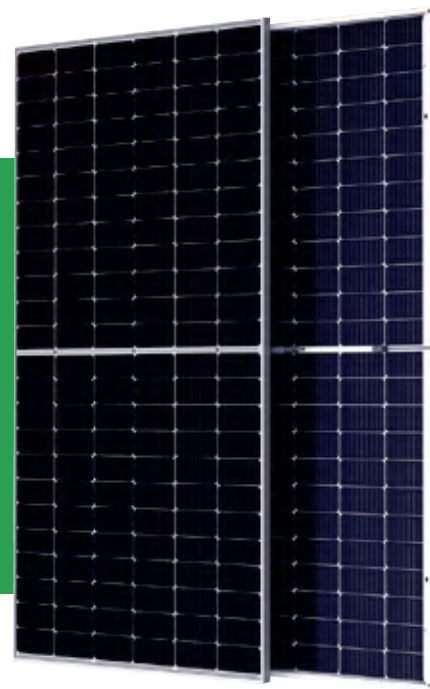




YWSP-S144/M 6H-BG 430-450W

BIFACIAL DUAL GLASS 144 LAYOUT MODULE

Product Advantages



High power

- Up to 450W front power and 20.7% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
- Lower resistance of half-cut and good reflection effect of MBB ensure high power



High reliability

- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Proven to be reliable in high temperature and humidity areas
- Certificated to fire class A
- Minimizes micro-crack and snail trails
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load



High energy generation

- Up to 25% additional power gain from back side depending on the albedo ;
- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Lower temp coefficient (-0.35%) and NMOT bring more energy leading to lower LCOE
- Better anti-shading performance and lower operating temperature



Easy to install

- Frame design makes module compatible with all racking and installation methods
- Easy to handle and install as normal framed module during transportation

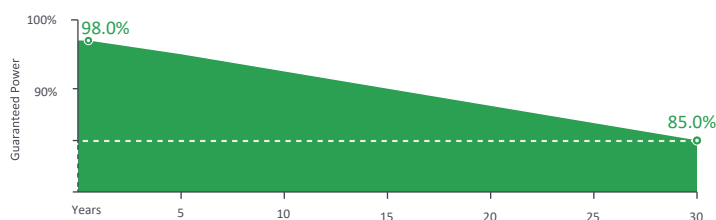
20.7%

Module efficiency

450W

Highest power output

Product Guarantee



-2.00%

First year power degradation

-0.45%

Annual degradation

12
Years

Materials and workmanship warranty

30
Years

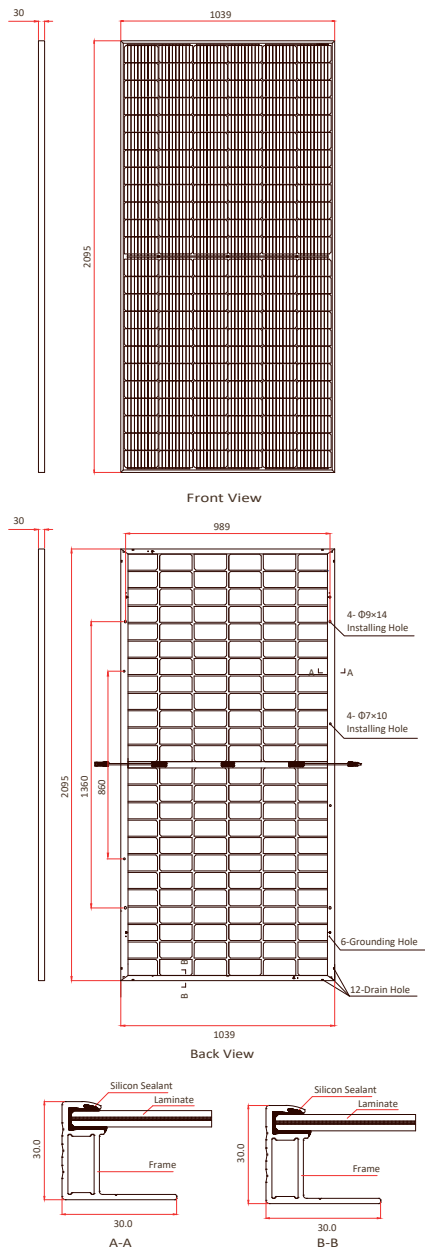
Linear power warranty

Product Certification

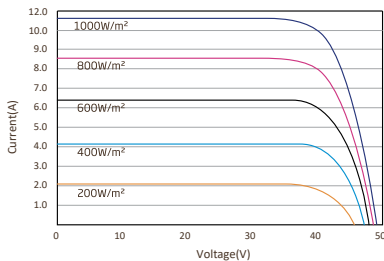


YWSP-S144/ M6H-BG

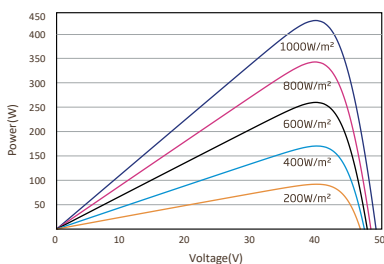
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(440W)



P-V CURVES OF PV MODULE(440W)



ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}(W_p)^*$	430	435	440	445	450
Power Tolerance- $P_{MAX}(W)$	0~+5				
Maximum Power Voltage- $V_{MP}(V)$	40.5	40.8	41.1	41.4	41.7
Maximum Power Current- $I_{MP}(A)$	10.62	10.67	10.71	10.75	10.80
Open Circuit Voltage- $V_{OC}(V)$	48.7	48.9	49.1	49.3	49.5
Short Circuit Current- $I_{SC}(A)$	11.20	11.29	11.37	11.45	11.53
Module Efficiency $\eta_m(\%)$	19.7	20.0	20.2	20.4	20.6

STC:Irradiance 1000W/m²,module temperature 25°C,AM=1.5; *Measuring tolerance:±3%

Electrical characteristics with different rear side power gain (reference to 435 Wp front)

Maximum Power- $P_{MAX}(W_p)$	457	479	500	522	544
Maximum Power Voltage- $V_{MP}(V)$	40.8	40.8	40.8	40.8	40.8
Maximum Power Current- $I_{MP}(A)$	11.20	11.74	12.27	12.80	13.34
Open Circuit Voltage- $V_{OC}(V)$	49.0	49.1	49.2	49.3	49.4
Short Circuit Current- $I_{SC}(A)$	11.80	12.36	12.93	13.49	14.05
Pmax gain	5%	10%	15%	20%	25%

Power Bifaciality:70±5%

ELECTRICAL DATA (NMOT)

Maximum Power- $P_{MAX}(W_p)$	325	329	333	337	341
Maximum Power Voltage- $V_{MP}(V)$	38.2	38.5	38.8	39.0	39.1
Maximum Power Current- $I_{MP}(A)$	8.51	8.55	8.58	8.63	8.71
Open Circuit Voltage- $V_{OC}(V)$	46.0	46.2	46.4	46.6	46.7
Short Circuit Current- $I_{SC}(A)$	9.02	9.05	9.08	9.12	9.15

NMOT:Irradiance 800W/m²,module temperature 20°C,AM=1.5, wind speed 1m/s

MECHANICAL DATA

Solar Cells	Monocrystalline silicon 166 mm (9BB)
Cell Orientation	144 cells (6 x 24)
Module Dimensions	2095x1039x30 mm
Weight	28.5 kg
Front Glass	2.0 mm , High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	POE/EVA
Back Glass	2.0 mm , Heat Strengthened Glass (White Grid Glass)
Frame	30mm Anodized Aluminium Alloy
Junction Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² Cable length 350mm or customized length

*Please refer to regional datasheet for specied connector.

TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	41°C(±3°C)
Temperature Coefficient of P_{MAX}	- 0.34%/°C
Temperature Coefficient of V_{OC}	- 0.25%/°C
Temperature Coefficient of I_{SC}	0.040%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	20A

PACKAGING CONFIGURATION

Modules per box: 35 pieces
Modules per 40' container: 770 pieces

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