

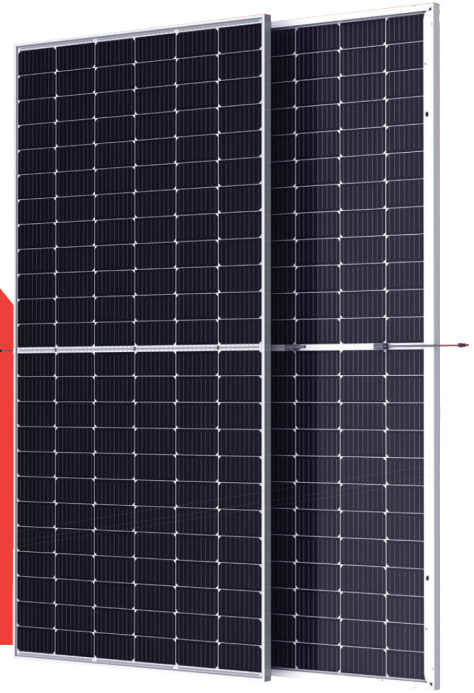


## UKS-S144/M6H-xxx-BG

BIFACIAL 166mm Half Cell

# 430-450W

BIFACIAL DUAL GLASS 144 LAYOUT MODULE



### PRODUCT ADVANTAGES



#### High power

- Up to 450W front power and 20.4% 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

20.4%

Module efficiency

450W

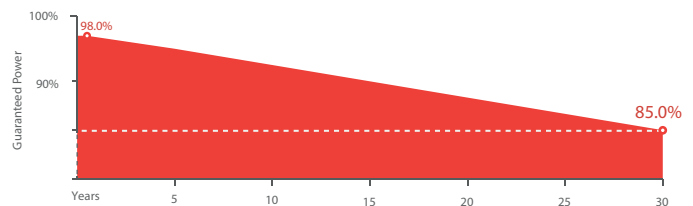
Highest power output



#### 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

### PERFORMANCE WARRANTY



#### 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

-2.00%

First year power degradation

-0.45%

Annual degradation

12  
Years

Materials and workmanship warranty

30  
Years

Linear power warranty



#### 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



LOW RISK BRITISH PROCUREMENT



BRITISH TECHNICAL SUPPORT



ALWAYS GRADE "A" CELLS

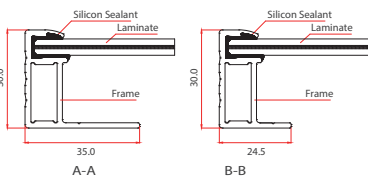
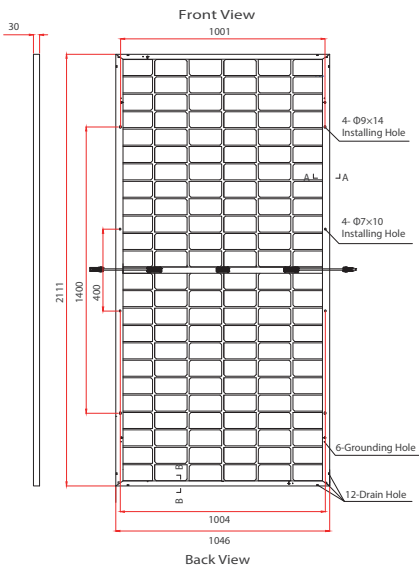
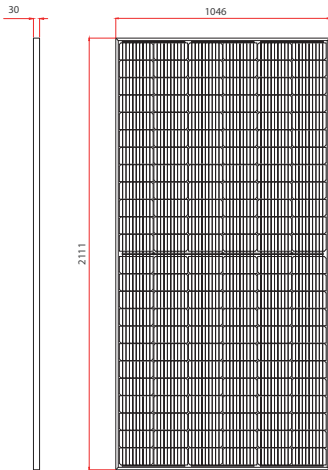


BRITISH QUALITY STANDARDS

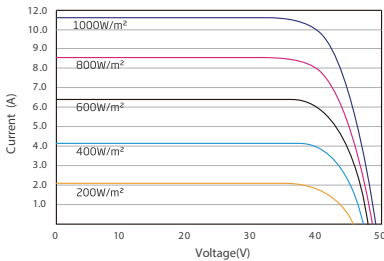


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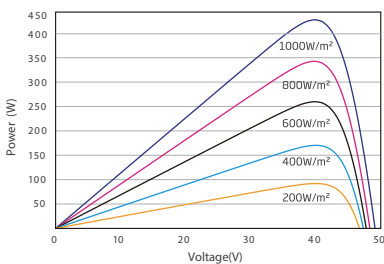
## DIMENSIONS OF PV MODULE(mm)



### I-V CURVES OF PV MODULE(440 W)



### P-V CURVES OF PV MODULE(440W)



## ELECTRICAL DATA (STC)

Peak Power Watts-P MAX (Wp)*	430	435	440	445	450
Power Tolerance-P MAX (W)	0 ~ +5				
Maximum Power Voltage-VMPP (V)	40.5	40.8	41.1	41.4	41.7
Maximum Power Current-IMPP (A)	10.62	10.67	10.71	10.75	10.80
Open Circuit Voltage-VOC (V)	48.7	48.9	49.1	49.3	49.5
Short Circuit Current-ISC (A)	11.20	11.24	11.28	11.32	11.36
Module Efficiency $\eta_m$ (%)	19.5	19.7	19.9	20.2	20.4

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5  
\*Measuring tolerance: ±3%.

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

Maximum Power-PMAX (Wp)	457	479	500	522	544
Maximum Power Voltage-VMPP (V)	40.8	40.8	40.8	40.8	40.8
Maximum Power Current-IMPP (A)	11.20	11.74	12.27	12.80	13.34
Open Circuit Voltage-VOC (V)	49.0	49.1	49.2	49.3	49.4
Short Circuit Current-ISC (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-PMAX (Wp)	325	329	333	337	341
Maximum Power Voltage-VMPP (V)	38.2	38.5	38.8	39.0	39.1
Maximum Power Current-IMPP (A)	8.51	8.55	8.58	8.63	8.71
Open Circuit Voltage-VOC (V)	46.0	46.2	46.4	46.6	46.7
Short Circuit Current-ISC (A)	9.02	9.05	9.08	9.12	9.15

NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;

## MECHANICAL DATA

Solar Cells	Monocrystalline silicon 166 mm (9BB)
Cell Orientation	144 cells (6 x 24)
Module Dimensions	2111x1046x30 mm
Weight	28.6 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 Portrait: 280/280 mm Landscape: 1400/1400 mm

\*Please refer to regional datasheet for specified connector.

## TEMPERATURE RATINGS

NMOT(Nominal Module Operating Temperature)	41°C (±3°C)
Temperature Coefficient of PMAX	- 0.35%/°C
Temperature Coefficient of VOC	- 0.25%/°C
Temperature Coefficient of ISC	0.04%/°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

+44 (0)1753 910327 | info@uksol.uk | www.uksol.uk | WhatsApp: +44 (0)7949 489911

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