



UKSOL

UKS-S144/M10H-XXX-BG 182 Bifacial SERIES

530-550W

144-CELL HALF BIFACIAL MODULE



Product Advantages



High module conversion efficiency

Module efficiency up to 21.3% achieved through advanced cell technology and manufacturing process



UKSOL current sorting process

Up to 2% power loss caused by current mismatch could be diminished by current sorting technique to maximize system power output



Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



Excellent weak light performance

More power output in weak light condition, such as cloudy, morning and sunset



Extended wind and snow load tests

Module certified to withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)



Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline



IP68 junction box

High waterproof level

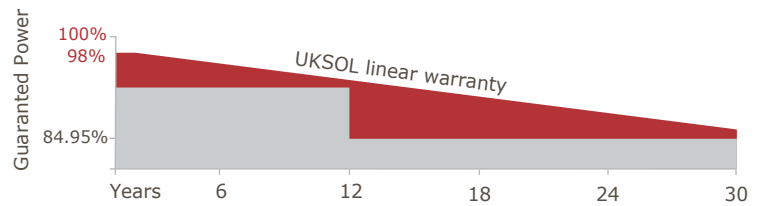
21.3%

Module efficiency

550W

Highest power output

Product Guarantee



Standard linear power guarantee

UKSOL linear power guarantee

-2.00%

First year power degradation

-0.45%

Annual degradation

12
Years

Materials and workmanship warranty

30
Years

Linear power warranty



LOW RISK BRITISH PROCUREMENT



BRITISH TECHNICAL SUPPORT



ALWAYS GRADE "A" CELLS



BRITISH QUALITY STANDARDS



UKS-S144/M10H-XXX-BG

Electrical Characteristics

STC	530	535	540	545	550
Maximum Power at STC (Pmax)*	530W	535W	540W	545W	550W
Optimum Operating Voltage (Vmp)	41.7V	41.8V	41.9V	42.0V	42.1V
Optimum Operating Current (Imp)	12.71A	12.80A	12.89A	12.98A	13.07A
Open Circuit Voltage (Voc)	49.5V	49.6V	49.7V	49.8V	49.9V
Short Circuit Current (Isc)	13.44A	13.53A	13.62A	13.71A	13.80A
Module Efficiency	20.5%	20.7%	20.9%	21.1%	21.3%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1000V/1500 V DC (IEC)				
Maximum Series Fuse Rating	25A				
Power Tolerance	0~+5W				

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

NMOT	530	535	540	545	550
Maximum Power at NMOT (Pmax)	394W	398W	402W	405W	409W
Optimum Operating Voltage (Vmp)	38.8V	38.9V	39.0V	39.1V	39.2V
Optimum Operating Current (Imp)	10.16A	10.23A	10.30A	10.37A	10.44A
Open Circuit Voltage (Voc)	46.3V	46.4V	46.5V	46.6V <td 46.7V	
Short Circuit Current (Isc)	10.83A	10.91A	10.98A	11.05A	11.12A

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

Electrical Characteristics with Different Rearside Power Gain (Reference to 540W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	567	621	675
Optimum Operating Voltage (Vmp)	41.9	42.0	42.1
Optimum Operating Current (Imp)	13.53	14.79	16.08
Open Circuit Voltage (Voc)	49.7	49.8	49.9
Short Circuit Current (Isc)	14.30	15.71	17.13
Module Efficiency (%)	21.9	24.0	26.1

Temperature Characteristics

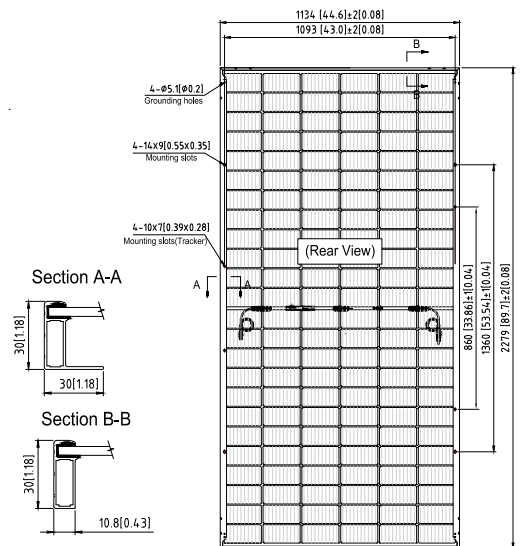
Nominal Module Operating Temperature(NMOT)	42± 2 °C
Temperature Coefficient of Pmax	-0.34 %/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.040 %/°C

Mechanical Characteristics

Solar Cell	Monocrystalline silicon 182 mm (10BB)
No. of Cells	144 (6 × 24)
Dimensions	2279× 1134 × 30 mm
Weight	31.5kgs
Front Glass	3.2 mm AR Coating Tempered Glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² , cable length 350mm or customized length
Refer.Bifaciality Factor	(70±5%)

Packing Configuration

Container	40'HC
Pieces per pallet	36
Pallets per container	20
Pieces per container	720
Packaging box dimensions	2330x1130x1270 mm
Packaging box weight	1200 kg



Current-Voltage & Power-Voltage Curve (550)

