



UKSOL



CERTIFIED

565-590W

182mm Half Cell, 144 Cells
TOPCon Monofacial Solar Module

22.8%

Module
Efficiency

590W

Highest Power
Output

Product Advantages



High Module Conversion Efficiency

Module efficiency up to 22.8% achieved through advanced cell technology and manufacturing process



Lower Operating Temperature

Lower Operating temperature and temperature coefficient increase the power output



Excellent Weak Light Performance

More power output in weak light conditions, 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)



IP68 Junction Box

High Waterproof and Dustproof level



Backed by a 30-Year British Warranty

- ✓ 30 Year Performance Warranty
- ✓ 15 Year Materials & Workmanship Warranty



Half Cell, MBB Technology

Series-then-parallel cell connection design, more reliable soldering technology



LOW RISK BRITISH
PROCUREMENT



BRITISH TECHNICAL
SUPPORT



ALWAYS GRADE
"A" CELLS



BRITISH QUALITY
STANDARDS



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UKS-S144-M10N-XXX-BG

ELECTRICAL DATA (STC)

Maximum Power (Pmax/W)*	565	570	575	580	585	590
Operating Voltage (Vmp/V)	42.9V	43.1V	43.3V	43.5V	43.7V	43.9
Operating Current (Imp/A)	13.18A	13.23A	13.28A	13.34A	13.39A	13.44
Open-Circuit Voltage (Voc/V)	51.6V	51.8V	52.0V	52.2V	52.4V	52.6
Short-Circuit Current (Isc/A)	13.94A	14.01A	14.08A	14.15A	14.22A	14.29
Module Efficiency η_m (%)	21.9%	22.1%	22.2%	22.4%	22.6%	22.8%

Power Tolerance

0~+5W

STC: Irradiance 1000W/m², module temperature 25°C, AM=1.5;

*Measuring tolerance: ±3%

ELECTRICAL DATA (NMOT)

Maximum Power at NMOT (Pmax)	430	434	438	442	446	450
Operating Voltage (VMP/V)	40.4	40.6	40.8	41.0	41.2	41.4
Operating Current (Imp/A)	10.65	10.69	10.74	10.78	10.83	10.87
Open-Circuit Voltage (Voc/V)	48.9	49.1	49.3	49.5	49.7	49.9

NMOT: Irradiance 800W/m², ambient temperature 20°C

Specifications may change without notice.

MECHANICAL DATA

Solar Cells	N-Type TOPCon Monocrystalline Silicon
Cell Orientation	144 (6*24)
Cell Dimensions	182 x 91 mm
Module Dimensions	2279 x 1134 x 35mm
Weight	29kgs
Encapsulant Material	POE/EVA
Front Glass	3.2mm AR coating tempered glass
Frame	30mm Anodized aluminium alloy
Cable Length	Portrait 350mm/customised
Packing configuration	31pcs/carton, 620pcs/40HQ
Cable Cross Section Size	TUV: 4mm
Junction Box	IP 68 Rated

OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC (IEC)
Operating Temperature	-40°C to +85°C
Maximum Series Fuse	25A
Static Loading	Snow Loading: 5400Pa / Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible

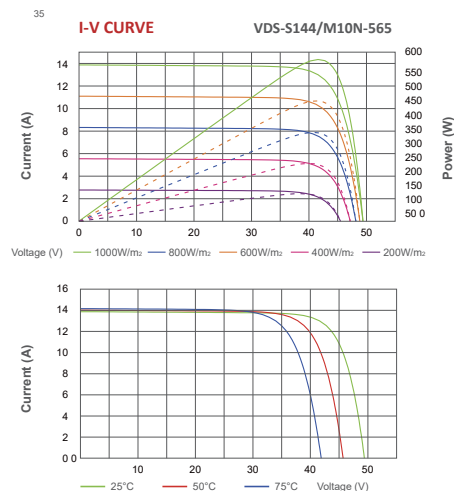
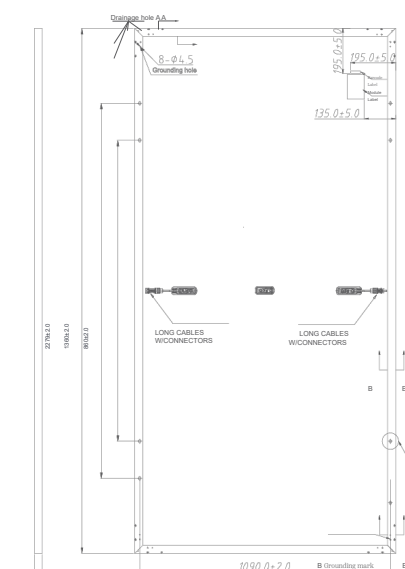
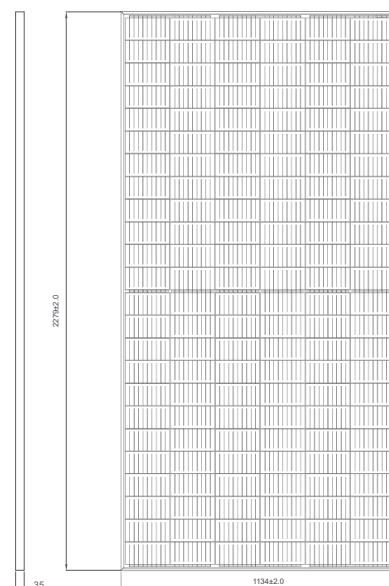
Temperature Ratings

Nominal Module Operating Temperature	42±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
NMOT	42±2°C

WEEE registration number (WPRN) is WEE/MM9084AA

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1.00% First Year Power Degradation

0.40% Annual Degradation