



Optimised Panel:
Avoid shading losses

445W with Tigo TS4-AO Optimiser

All Black TOPCon, 108 Cell Bifacial
Module, Half Cell

Tigo®



Product Advantages



Panel-Level Optimisation

The integrated Tigo optimiser lets each module operate independently, boosting yield in shaded, complex, or mismatched arrays.



More Energy from Every Roof

The Tigo Optimiser upgrades underperforming panels and improves overall array efficiency, helping you capture more usable power over the system lifetime.



Works with most systems

Designed to fit quickly onto standard solar panels and compatible with a wide range of inverters — easy to specify into new or existing builds.



Real-time monitoring built-in

Provides module-level performance visibility, helping installers and owners spot issues fast and maintain peak output.



Half Cell, MBB Technology

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



Backed by a 30-Year British Warranty

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



LOW RISK BRITISH
PROCUREMENT



BRITISH TECHNICAL
SUPPORT



ALWAYS GRADE
"A" CELLS



BRITISH QUALITY
STANDARDS



+44 (0)1753 910327 | info@uksol.uk | www.uksol.uk

UKSOL and the UKSOL logo are registered trademarks of UKSOL Ltd.

UKS-S108-M10N-BG-OPT

UKSOL 445W Tigo Optimised Bifacial N-Type TOPCon Panel



ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)*	445
Maximum Power Voltage-VMP (V)	33.1
Maximum Power Current-IMP (A)	13.44
Open Circuit Voltage-VOC (V)	39.7
Short Circuit Current-ISC (A)	14.27
Module Efficiency η_m (%)	22.8
Power Tolerance-PMAX (W)	0 $\rightarrow$ +5

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

ELECTRICAL DATA (BNPI)

Peak Power-PMAX (Wp)*	490
Maximum Power Voltage-VMP (V)	33.1
Maximum Power Current-IMP (A)	14.80
Open Circuit Voltage-VOC (V)	39.7
Short Circuit Current-ISC (A)	15.76

BNPI: Irradiance 1000W/m², module temperature 25°C

ELECTRICAL DATA (NMOT)

Maximum Power-PMAX (Wp)*	341
Maximum Power Voltage-VMP (V)	31.2
Maximum Power Current-IMP (A)	10.93
Open Circuit Voltage-VOC (V)	37.6
Short Circuit Current-ISC (A)	11.55

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

MECHANICAL DATA

Solar Cells	N-Type TOPCon Monocrystalline Silicon
Cell Orientation	108 cells (6 x 18)
Module Dimensions	1724 x 1134 x 30mm
Weight	25.1kg
Front Glass	2.0mm tempered glass
Encapsulant Material	POE/EVA
Back Glass	2.0mm semi-tempered glass
Frame	30mm anodised aluminium alloy (silver/black frame optional)
Junction Box	IP68 Rated
Cables	Photovoltaic Technology Cable 4.0 mm ² Cable length 350 mm or customized length

TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	42°C ($\pm$ 2°C)
Temperature Coefficient of PMAX	-0.29%/°C
Temperature Coefficient of VOC	-0.25%/°C
Temperature Coefficient of ISC	+0.046%/°C

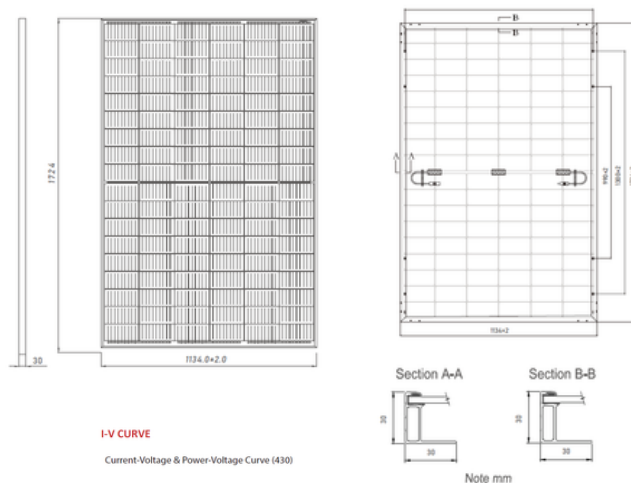
(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

MAXIMUM RATINGS

Operational Temperature	-40 $\rightarrow$ +85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	25A

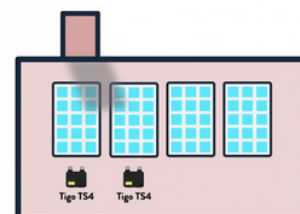
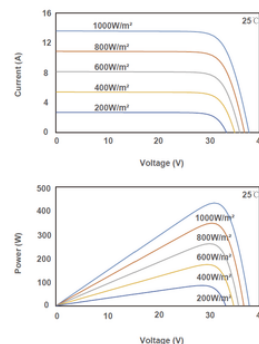
PACKAGING CONFIGURATION

Modules per box	36 pieces
Modules per 40' container	936 pieces



I-V CURVE

Current-Voltage & Power-Voltage Curve (430)



WEEE registration number (WPRN) is WEE/MM9084AA

1.00% First Year Power Degradation

0.40% Annual Degradation



With integrated Tigo optimisation, shading on one panel won't drag down the rest of the array – each module performs independently for maximum yield.

Tigo®

+44 (0)1753 910327 | info@uksol.uk | www.uksol.uk

UKSOL and the UKSOL logo are registered trademarks of UKSOL Ltd.