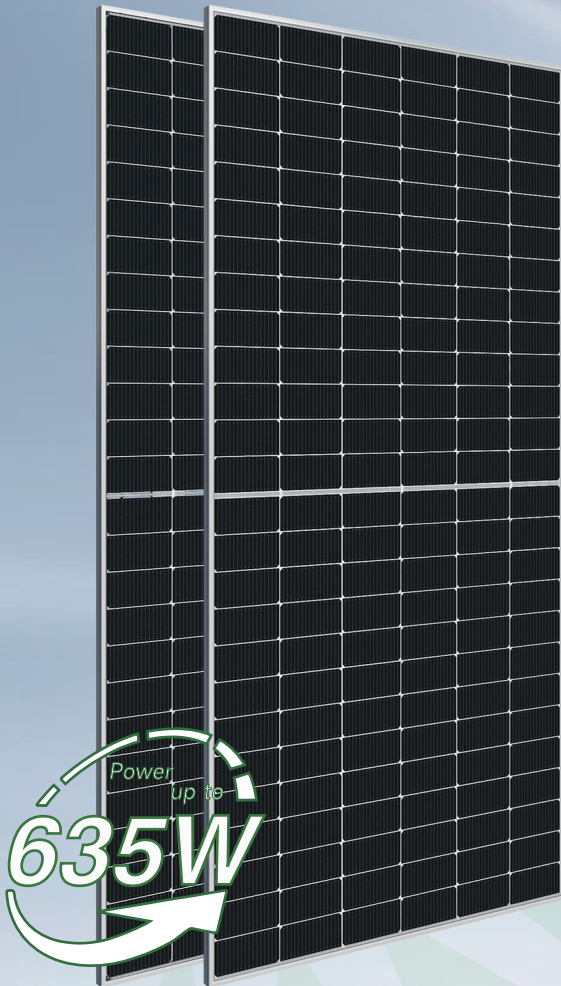


TOPCON G10 Series 615-635W

156-cell Bifacial TOPCon Half Cell
Double-glass Solar Module



TOPCon Cell Technology

N-type with very Lower LID, Better low irradiance response



SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.



Up to 80% Bifaciality

Natural symmetrical bifacial structure bringing more energy yield from the backside.



Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extend module lifespan.



Higher reliability

Industrial leading product and performance warranty, ensuring modules' consistent outstanding performance.



Suitable for Utility project

Lower BOS cost, lower LCOE.

WARRANTY

Product Warranty **30** years

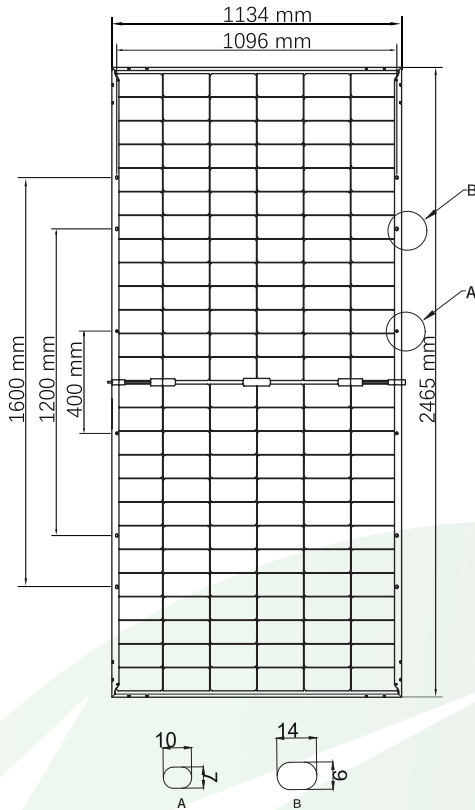
Linear Power Warranty **30** years



TOPCon G10 Series 615-635W 156-cell Bifacial TOPCON Half Cell Module

Engineering Drawings

Unit: mm



Electrical Characteristics (STC*)

THS-D78HND	615W	620W	625W	630W	635W
Maximum Power (Pmax)	615W	620W	625W	630W	635W
Module Efficiency (%)	22.0%	22.2%	22.4%	22.5%	22.7%
Optimum Operating Voltage(Vmp)	47.21V	47.38V	47.55V	47.71V	47.87V
Optimum Operating Current (Imp)	13.03A	13.09A	13.15A	13.21A	13.27A
Open Circuit Voltage (Voc)	56.70V	56.83V	56.95V	57.08V	57.21V
Short Circuit Current (Isc)	13.69A	13.75A	13.80A	13.86A	13.92A
Operating Module Temperature	-40 to +85°C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	25A				
Power Tolerance	0~+5W				
Bifaciality	80%±5%				

*STC: Irradiance 1000 W/m², cell temperature 25°C, AM=1.5. Tolerance of Pmax is within +/- 3%.

BSTC*

Maximum Power (Pmax)	664W	670W	675W	680W	685W
Optimum Operating Voltage(Vmp)	47.24V	47.43V	47.61V	47.80V	47.99V
Optimum Operating Current (Imp)	14.06A	14.12A	14.18A	14.23A	14.27A
Open Circuit Voltage (Voc)	55.79V	55.99V	56.18V	56.38V	56.58V
Short Circuit Current (Isc)	14.79A	14.84A	14.89A	14.95A	15.02A

**BSTC: Front side irradiation 1000W/m², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25°C.

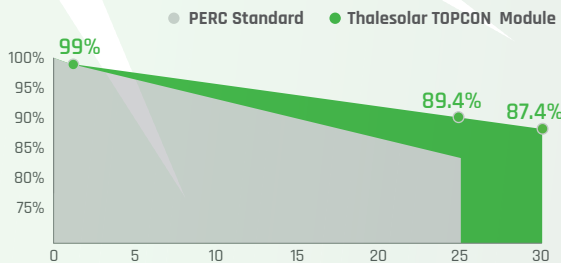
Temperature Characteristics

Nominal Operating Cell Temp.(NOCT)	43°C ± 2°C
Temperature Coefficient of Pmax	-0.30%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.046%/°C

Safety & Warranty

Safety Class	Class II
Product Warranty	30 yrs Workmanship
Performance Warranty	30 yrs Linear Warranty*

*Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.4%, and the power is no less than 87.4% until the 30th year.



*Refer to Thalesolar standard warranty for details

Mechanical Characteristics

Cell Type	TOPCon Mono 182X91mm
Cell Connection	156(6X26)
Module Dimension	2465X1134X30mm
Weight	33.9kg
Junction Box	IP68
Output Cable	4mm ² , 300mm in length, length can be customized/UV resistant
Connectors Type	MC4 original/MC4 compatible
Frame	Anodised aluminum alloy
Encapsulant	PDE/EPE
Front Load	5400Pa
Rear Load	2400Pa
Glass Thickness	Double solar glass 2.0mm

Shipping Configurations

Container Type	HC
Container Size	40'
Pallets Per Container	16
Modules Per Pallet (pcs)	36
Modules Per Container (pcs)	576