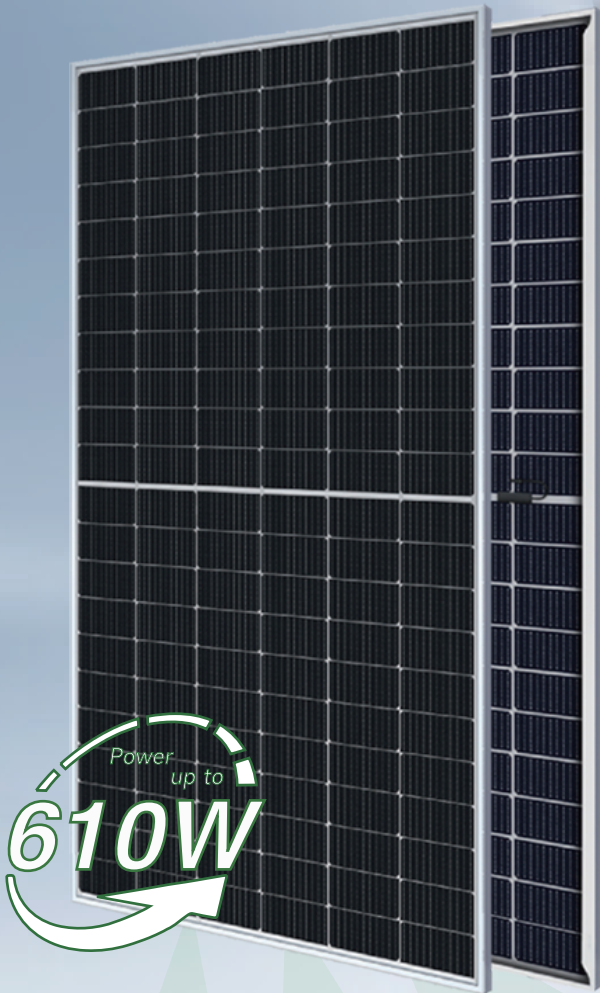


TOPCON G10 Series 590-610W

132-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 90% 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

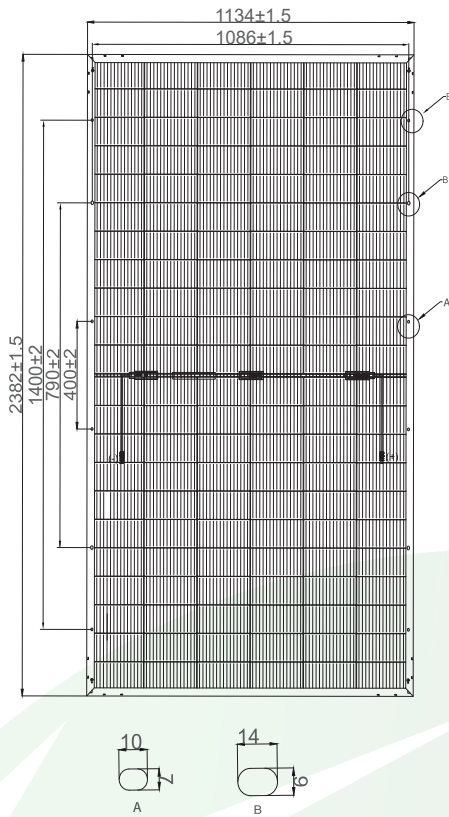
Linear
Power
Warranty **30** years



TOPCon G10 Series 590-610W 132-cell Bifacial TOPCON Half Cell Module

Engineering Drawings

Unit: mm



Electrical Characteristics (STC*)

THS-F66HND	590W	595W	600W	605W	610W
Maximum Power (Pmax)	590W	595W	600W	605W	610W
Module Efficiency (%)	21.8%	22.0%	22.2%	22.4%	22.6%
Optimum Operating Voltage(Vmp)	39.68V	39.80V	39.92V	40.06V	40.18V
Optimum Operating Current (Imp)	14.87A	14.95A	15.03A	15.10A	15.18A
Open Circuit Voltage (Voc)	47.51V	47.68V	47.86V	48.06V	48.26V
Short Circuit Current (Isc)	15.69A	15.75A	15.81A	15.87A	15.93A
Operating Module Temperature	-40 to +85°C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	30A				
Power Tolerance	0~+5W				
Bifaciality	80%±10%				

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

BSTC*

	654W	659W	663W	669W	673W
Maximum Power (Pmax)	654W	659W	663W	669W	673W
Optimum Operating Voltage(Vmp)	39.68V	39.80V	39.92V	40.06V	40.18V
Optimum Operating Current (Imp)	16.47A	16.54A	16.61A	16.67A	16.74A
Open Circuit Voltage (Voc)	47.51V	47.68V	47.86V	48.06V	48.26V
Short Circuit Current (Isc)	17.38A	17.45A	17.52A	17.59A	17.66A

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

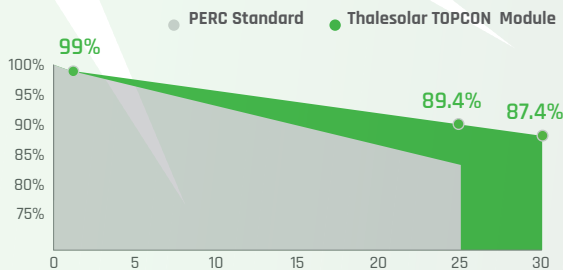
Temperature Characteristics

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	0.045%/°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 210X91mm
Cell Connection	132(6X24)
Module Dimension	2382X1134X30mm
Weight	32.5kg
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	18
Modules Per Pallet (pcs)	36
Modules Per Container (pcs)	648