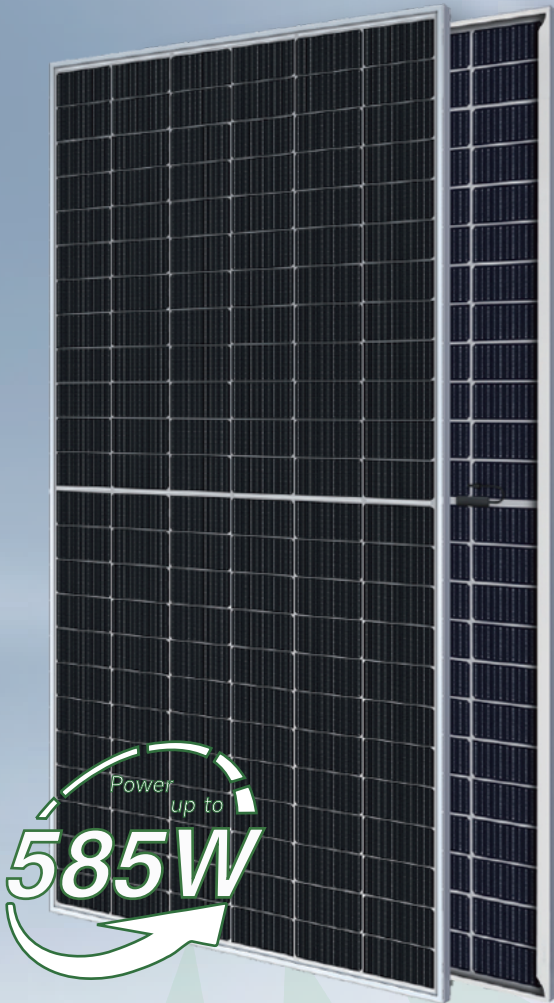


TOPCON G12 Series 565-585W

144-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

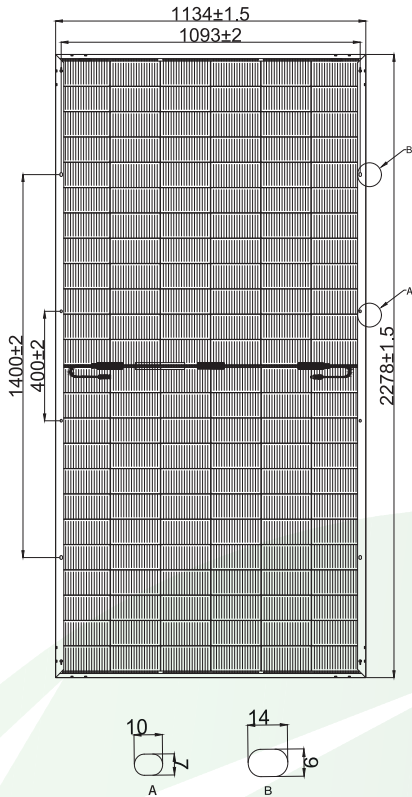
Linear
Power
Warranty **30** years



TOPCon G12 Series 565-585W 144-cell Bifacial TOPCON Half Cell Module

Engineering Drawings

Unit: mm



Electrical Characteristics (STC*)

THS-D72HND	565W	570W	575W	580W	585W
Maximum Power (Pmax)	565W	570W	575W	580W	585W
Module Efficiency (%)	22.9%	22.1%	22.3%	22.5%	22.6%
Optimum Operating Voltage(Vmp)	43.53V	43.68V	43.83V	43.98V	44.12V
Optimum Operating Current (Imp)	12.98A	13.05A	13.12A	13.19A	13.26A
Open Circuit Voltage (Voc)	51.33V	51.48V	51.64V	51.79V	51.94V
Short Circuit Current (Isc)	13.57A	13.64A	13.71A	13.78A	13.85A
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%.

NMOT*

Maximum Power (Pmax)	430W	433W	437W	441W	445W
Optimum Operating Voltage(Vmp)	40.8V	41.0V	41.2V	41.4V	41.6V
Optimum Operating Current (Imp)	10.54A	10.56A	10.61A	10.65A	10.69A
Open Circuit Voltage (Voc)	48.7V	48.9V	49.1V	49.2V	49.3V
Short Circuit Current (Isc)	11.40A	11.47A	11.53A	11.60A	11.67A

*NMOT: Front side irradiation 800W/m², wind speed 1m/s, ambient temperature 20°C.

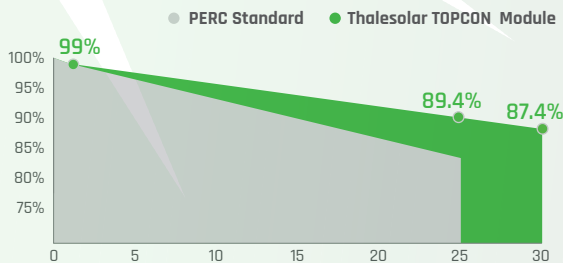
Temperature Characteristics

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	144(6X24)
Module Dimension	2278X1134X35mm
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	20
Modules Per Pallet (pcs)	31
Modules Per Container (pcs)	620