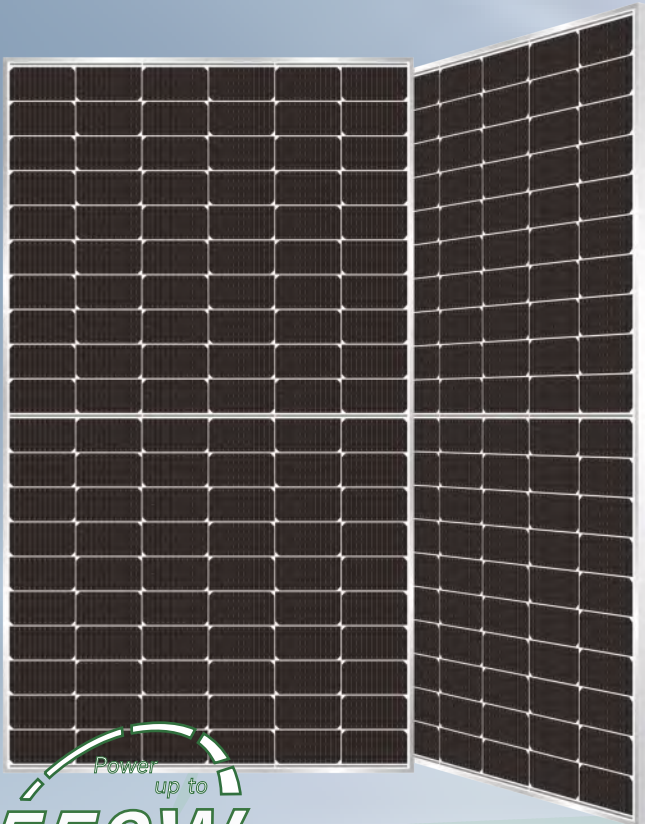


PERC G10 Series 445-465W

120-cell PERC Half Cell Solar Module



Power up to
550W



SMBB design with Half-Cut Technology

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



Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extent 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 **20** years

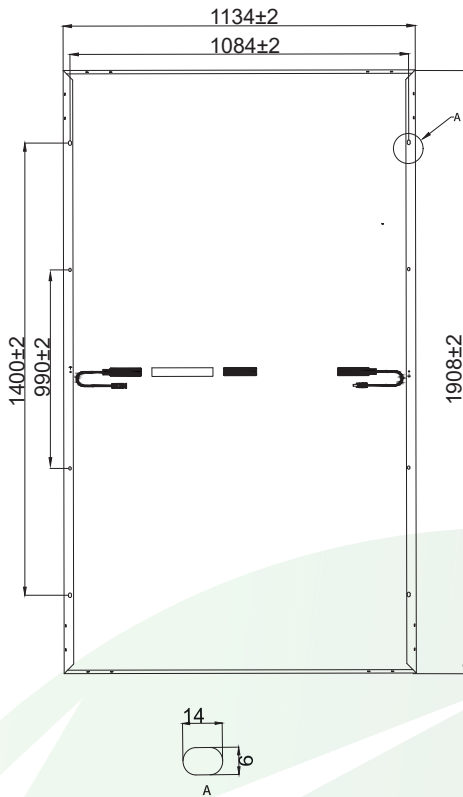
Linear
Power
Warranty **30** years



PERC G10 Series 445-465W 120 Cell PERC Module

Engineering Drawings

Unit: mm



Electrical Characteristics (STC*)

THS-D60HP	445W	450W	455W	460W	465W
Maximum Power (Pmax)	445W	450W	455W	460W	465W
Module Efficiency (%)	20.32%	20.55%	20.78%	21.01%	21.24%
Optimum Operating Voltage(Vmp)	34.93V	35.16V	35.39V	35.61V	35.83V
Optimum Operating Current (Imp)	12.74A	12.80A	12.86A	12.92A	12.99A
Open Circuit Voltage (Voc)	41.73V	41.96V	42.19V	42.41V	42.63V
Short Circuit Current (Isc)	13.49A	13.55A	13.61A	13.67A	13.73A
Operating Module Temperature	-40 to +85°C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	25A				
Power Tolerance	0~+5W				

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

NMOT*

Maximum Power (Pmax)	337W	341W	344W	348W	352W
Optimum Operating Voltage(Vmp)	32.63V	32.85V	33.06V	33.27V	33.48V
Optimum Operating Current (Imp)	10.33A	10.38A	10.41A	10.46A	10.58A
Open Circuit Voltage (Voc)	38.98V	39.20V	39.41V	39.62V	39.83V
Short Circuit Current (Isc)	10.95A	11.00A	11.05A	11.10A	11.15A

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

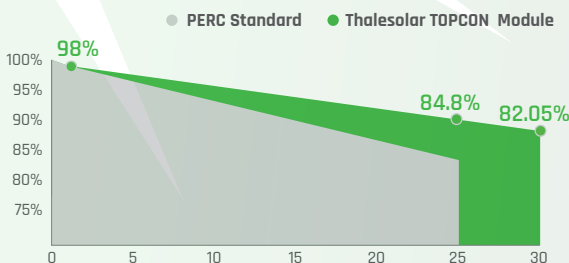
Temperature Characteristics

Nominal Operating Cell Temp.(NOCT)	45°C ± 2°C
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.05%/°C

Safety & Warranty

Safety Class	Class II
Product Warranty	20 yrs Workmanship
Performance Warranty	30 yrs Linear Warranty*

*Less than 2% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.55%, and the power is no less than 82.05% until the 30th year.



*Refer to Thalesolar standard warranty for details

Mechanical Characteristics

Cell Type	PERC Mono 182X91mm
Cell Connection	120(6X20)
Module Dimension	1908X1134X30mm
Weight	22.5kg
Junction Box	IP68
Output Cable	4mm ² , 1200mm in length, length can be customized/UV resistant
Connectors Type	MC4 original/MC4 compatible
Frame	Anodised aluminum alloy
Encapsulant	EVA
Front Load	5400Pa
Rear Load	2400Pa
Glass Thickness	Solar glass 3.2mm

Shipping Configurations

Container Type	HC
Container Size	40'
Pallets Per Container	24
Modules Per Pallet (pcs)	36
Modules Per Container (pcs)	864