THORNOVA solar

For Canada

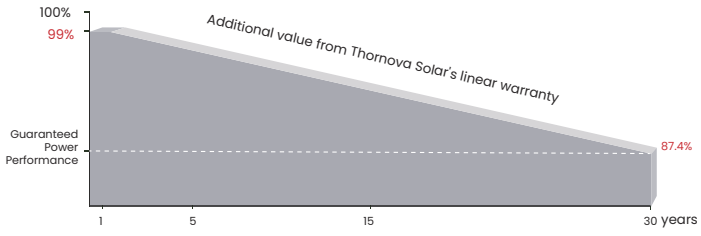
560-580 W

High Efficiency Bifacial Dual Glass TOPCon Module

TS-BGT72

- Bifacial technology allows for the harvesting of up to an additional 25% energy from the rear side of the module.
- 30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module.
- LID — N-type solar cell has no LID naturally which can increase power generation.
- Excellent low irradiance performance.
- Enhanced light trapping and optimized current collection contribute to the improvement of both module power output and reliability.
- Industry leading lowest thermal coefficient of power.
- Design optimized for lower operating current, resulting in minimized hot spot loss and improved temperature coefficient.
- 2400Pa/5400Pa — Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).
- 100% triple EL test enables remarkable reduction of module hidden crack rate.

LINEAR PERFORMANCE WARRANTY



15 years
Product quality & process guarantee

30 years
Linear power guarantee

0.40 %
Annual Degradation

RE INSURANCE

Munich RE

Ariel Re

* Optional performance warranty insurance. Please contact our local sales staff for more information.

COMPREHENSIVE CERTIFICATES

C SP US

ISO 9001: Quality Management System

ISO 14001: Environmental Management System Standard

ISO 45001: International Occupational Health and Safety Assessment System Standard

* Different markets have different certification requirements. Also, the products are under rapid innovation. Please confirm the certification status with regional sales representatives.

ELECTRICAL CHARACTERISTICS

72-cell formats

Model of modules	TS-BGT72(560)		TS-BGT72(565)		TS-BGT72(570)		TS-BGT72(575)		TS-BGT72(580)	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak power - P_{mp} (W)	560	417	565	421	570	425	575	428	580	432
Open circuit voltage - V_{oc} (V)	50.11	47.30	50.26	47.44	50.47	47.64	50.90	48.05	51.19	48.32
Short circuit current - I_{sc} (A)	13.93	11.25	13.98	11.30	14.01	11.32	14.03	11.34	14.06	11.36
MPP voltage - V_{mp} (V)	42.54	39.82	42.82	40.09	43.10	40.35	43.38	40.61	43.52	40.74
MPP current - I_{mp} (A)	13.16	10.48	13.19	10.50	13.22	10.52	13.25	10.55	13.33	10.60
Module efficiency - η_m (%)	21.7 %		21.9 %		22.1 %		22.3 %		22.5 %	

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 ℃, Spectra at AM1.5
NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20℃, Spectra at AM1.5, Wind at 1m/s

ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER BIN (REFERENCE TO 13.5% IRRADIANCE RATIO)

Peak power - P_{mp} (W)	620	626	632	637	643
Open circuit voltage - V_{oc} (V)	50.11	50.26	50.47	50.90	51.19
Short circuit current - I_{sc} (A)	15.43	15.49	15.53	15.55	15.58
MPP voltage - V_{mp} (V)	42.54	42.82	43.10	43.38	43.52
MPP current - I_{mp} (A)	14.59	14.62	14.65	14.69	14.77
Irradiance ratio (rear/front)	13.5 %				

STRUCTURAL CHARACTERISTICS

Module dimension (L*W*H)	2278 x 1134 x 35 mm (89.69 x 44.65 x 1.38 inch)
Weight	32.3 kg (71.21 lbs)
Number of cells	144 cells
Cell	N-type Monocrystalline 182x91 mm(7.17 x 3.58inch)
Glass	(F)2.0mm, Anti-Reflection Coating (B)2.0mm, Heat Strengthened Glass
Frame	Anodized aluminum alloy
Junction box	IP68, 3 bypass diodes
Output wire	4.0 mm²
Wire length	300mm/customized
Connector	MC4 / 1500 V
Packing Specification	31 pcs/Pallet; 558 or 620pcs/40'HQ

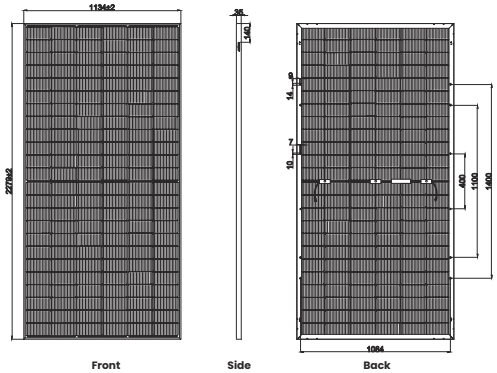
OPERATING PARAMETERS

Power tolerance (W)	(0,+5)
Maximum system voltage (V)	1500
Maximum rated fuse current (A)	30
Current operating temperature (°C)	-40~+85 °C
Mechanical load	5400 Pa / 2400 Pa
Bifaciality	80±5 %

TEMPERATURE PERFORMANCE RATINGS

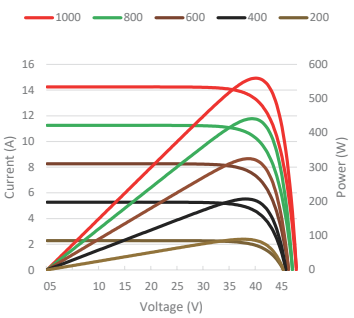
Temperature coefficient (P_{max})	-0.30 %/°C
Temperature coefficient (V_{oc})	-0.26 %/°C
Temperature coefficient (I_{sc})	+0.046 %/°C
Nominal operating cell temperature	43±2 °C

MODULE DIMENSIONS (MM)

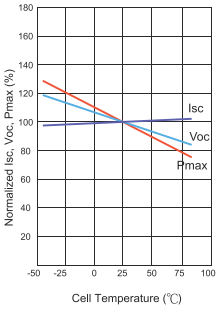


* The unmarked tolerance is ±1 mm
Length shown in mm

Characteristic Curves(560W)



Temperature Dependence of Isc,Voc,Pmax



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