



■ P-Type Solar Module

KEY FEATURES



Excellent performance in low-light environments



High quality junction box and connector systems



100% inspection, to guarantee the reliability of solar systems



Lower temperature



Anti PID



Enhanced safety by excellent fire resistance



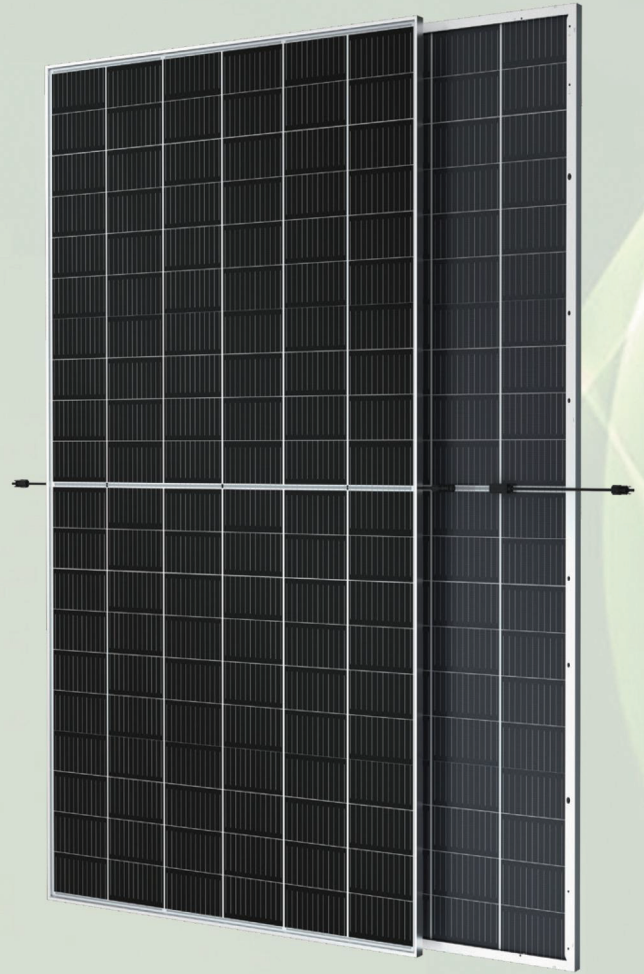
Perfect for sandy, snowy and high latitude regions



Lower operating temperature, more reliable



Cutcell, Less internal power loss, Less mismatch loss



GSPV-M12/120H-585W-605W 585~605 Watt

➤ 210mm 120 Cells PV Solar Module

BLACK

*BLACK FRAME/BLACK BACK-SHEET PRODUCTS ARE AVAILABLE UPON REQUEST



12 years

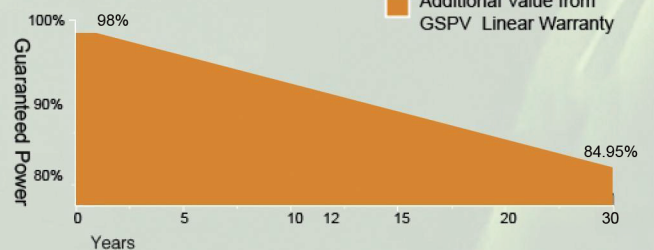
Product Warranty

30 years

Linear Power Warranty

0.45%

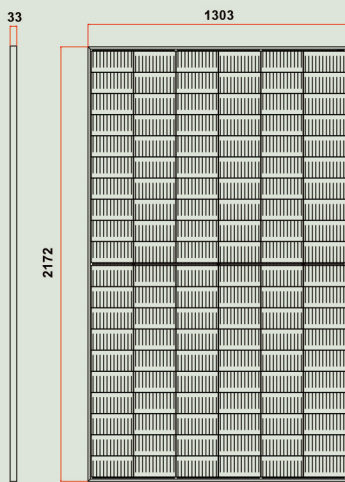
Annual Degradation over 30 years



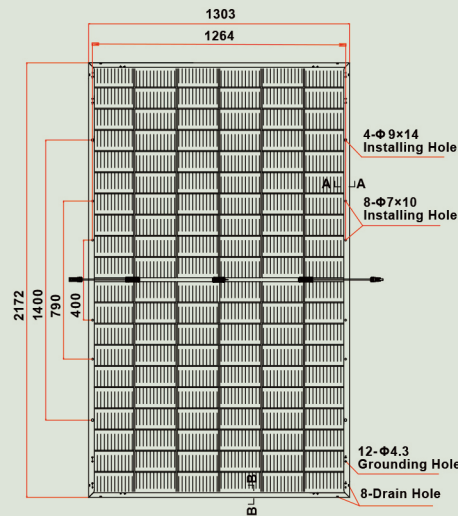
IEC61215
IEC61730
UL61215
UL61730



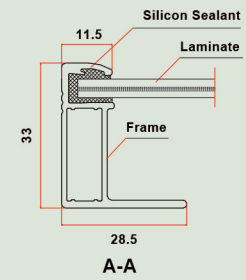
DIMENSIONS OF PV MODULE(mm)



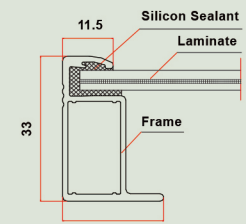
Front View



Back View



A-A



B-B

ELECTRICAL DATA (STC)

	585	590	595	600	605
Peak Power Watts-P _{MAX} (Wp)*					
Power Tolerance-P _{MAX} (W)			0 ~ +5		
Maximum Power Voltage-V _{MPP} (V)	34.0	34.2	34.4	34.6	34.8
Maximum Power Current-I _{MPP} (A)	17.21	17.25	17.30	17.34	17.39
Open Circuit Voltage-V _{OC} (V)	41.1	41.3	41.5	41.7	41.9
Short Circuit Current-I _{SC} (A)	18.26	18.31	18.36	18.42	18.48
Module Efficiency η _m (%)	20.7	20.8	21.0	21.2	21.4

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	120 cells
Module Dimensions	2172×1303×33 mm (85.51×51.30×1.30 inches)
Weight	34.9 kg (76.9 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	33mm(1.30 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Portrait: 350/280 mm(13.78/11.02 inches) Length can be customized
Connector	MC4 EVO2 / TS4*

*Please refer to regional datasheet for specified connector.

Electrical characteristics with different power bin(reference to 10% Irradiance ratio)

	626	631	637	642	647
Total Equivalent power -P _{MAX} (Wp)					
Maximum Power Voltage-V _{MPP} (V)	34.0	34.2	34.4	34.6	34.8
Maximum Power Current-I _{MPP} (A)	18.41	18.46	18.51	18.55	18.61
Open Circuit Voltage-V _{OC} (V)	41.1	41.3	41.5	41.7	41.9
Short Circuit Current-I _{SC} (A)	19.54	19.59	19.65	19.71	19.77
Irradiance ratio (rear/front)			10%		

Power Bifaciality: 70±5%.

ELECTRICAL DATA (NOCT)

Maximum Power-P _{MAX} (Wp)	443	447	451	454	458
Maximum Power Voltage-V _{MPP} (V)	31.7	31.9	32.0	32.2	32.4
Maximum Power Current-I _{MPP} (A)	13.97	14.01	14.06	14.10	14.14
Open Circuit Voltage-V _{OC} (V)	38.7	38.9	39.1	39.3	39.5
Short Circuit Current-I _{SC} (A)	14.72	14.76	14.80	14.84	14.89

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P _{MAX}	- 0.34%/°C
Temperature Coefficient of V _{OC}	- 0.25%/°C
Temperature Coefficient of I _{SC}	0.04%/°C

MAXIMUM RATINGS

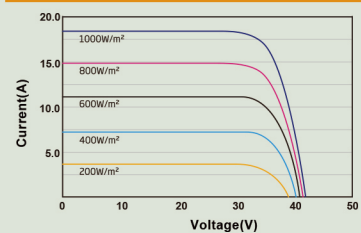
Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	35A

WARRANTY

12 year Product Workmanship Warranty
25 year Power Warranty
2% first year degradation
0.45% Annual Power Attenuation

(Please refer to product warranty for details)

I-V CURVES OF PV MODULE(595W)



P-V CURVES OF PV MODULE(595W)

