



BIPRO

TM7G72M **144-cell**

580 - 600W

Bifacial Dual Glass

16BB Half-cut N-type

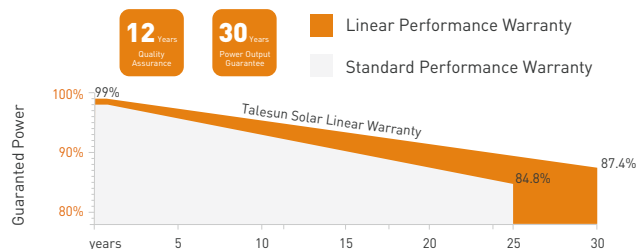


SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



PERFORMANCE WARRANTY



KEY FEATURES



16BB Half-cut Cell Technology

Lower LID/LeTID degradation and better low light performance
Attenuation $\leq 1\%$ (1st year) / $\leq 0.4\%$ (Linear)



Industry Leading High Yield

Bifacial TOPCon cell technology,
Dual-sided power generation gain from back side depending on albedo, significantly reduce LCOE



Excellent Anti-PID Performance

192 hours Anti-PID test



Wider Application

No water-permeability and high wear-resistance,
can be widely used in high-humid, windy and dusty area



IP68 Junction Box

High waterproof level

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* GL-EN-Version 2024.12.06

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	580	440	585	444	590	448	595	452	600	456
Operating Voltage (Vmpp/V)	43.88	41.40	44.01	41.50	44.16	41.70	44.30	41.90	44.49	42.00
Operating Current (Impp/A)	13.22	10.64	13.29	10.69	13.36	10.73	13.43	10.78	13.49	10.83
Open-Circuit Voltage (Voc/V)	52.50	49.80	52.70	50.00	52.90	50.10	53.10	50.30	53.30	50.50
Short-Circuit Current (Isc/A)	13.95	11.25	14.01	11.29	14.07	11.34	14.13	11.39	14.19	11.44
Module Efficiency [%]	22.50		22.70		22.80		23.00		23.20	

STC: Irradiance 1000W/m², Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3%
 NMOT: Irradiance 800W/m², Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

REAR SIDE POWER GAIN(REFERENCE TO 590W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	620	649	679	708	738
Vmpp/V	44.16	44.16	44.16	44.16	44.16
Impp/A	14.03	14.70	15.36	16.03	16.70
Voc/V	52.90	52.90	52.90	52.90	52.90
Isc/A	14.77	15.48	16.18	16.88	17.59

MECHANICAL CHARACTERISTICS

Cell Type	N-type Mono-Crystalline (16Busbar)
No. of Cells	144pcs in series (6*24)
Module Dimensions	2278*1134*30mm [89.69*44.65*1.18inches]
Weight	31.8kg [70.11lbs.]
Front Glass	2.0mm AR Coating Semi-tempered Glass
Back Glass	2.0mm Glazed Semi-tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Output Cables	4mm ² (IEC), 12AWG(UL) 350mm(+), 250mm(-) or Customized Length
Connectors	T01/LJQ-3-CSY/MC4/MC4-EV02

APPLICATION CONDITIONS

Maximum System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	30A
Safety Protection Class	Class II
Mechanical Load*	Front side 5400Pa, Back side 2400Pa
Refer. Bifaciality Factor	80%±5%

*Refer to the installation manual for details

TEMPERATURE CHARACTERISTICS

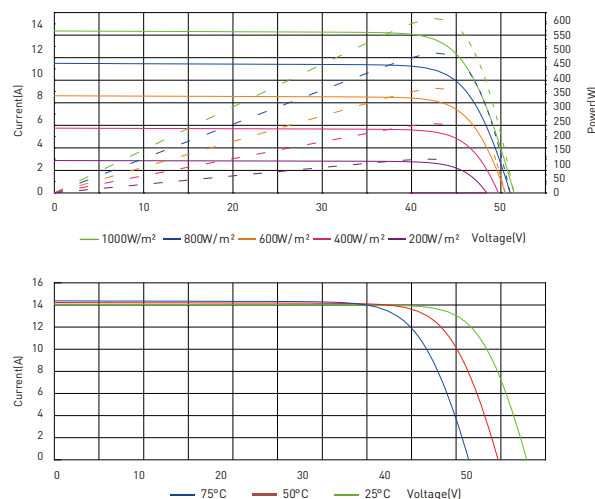
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	+0.043%/°C
Nominal Module Operating Temperature(NMOT)	43±2°C

PACKING CONFIGURATION

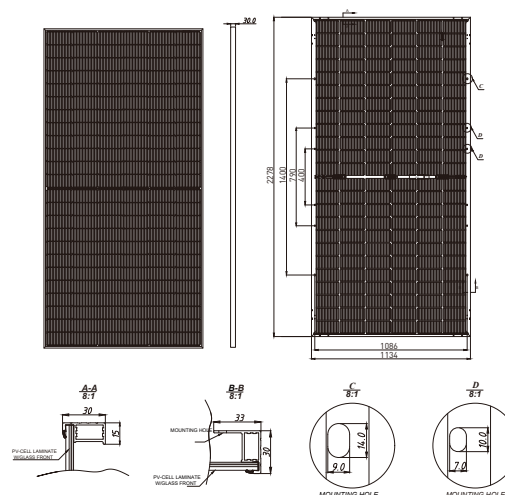
Pieces Per Pallet	36	36(USA)
Pieces Per Container(40'HQ)	720	576

Electrical Performance

TM7G72M/590W



TECHNICAL DRAWINGS



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