

TALESUN

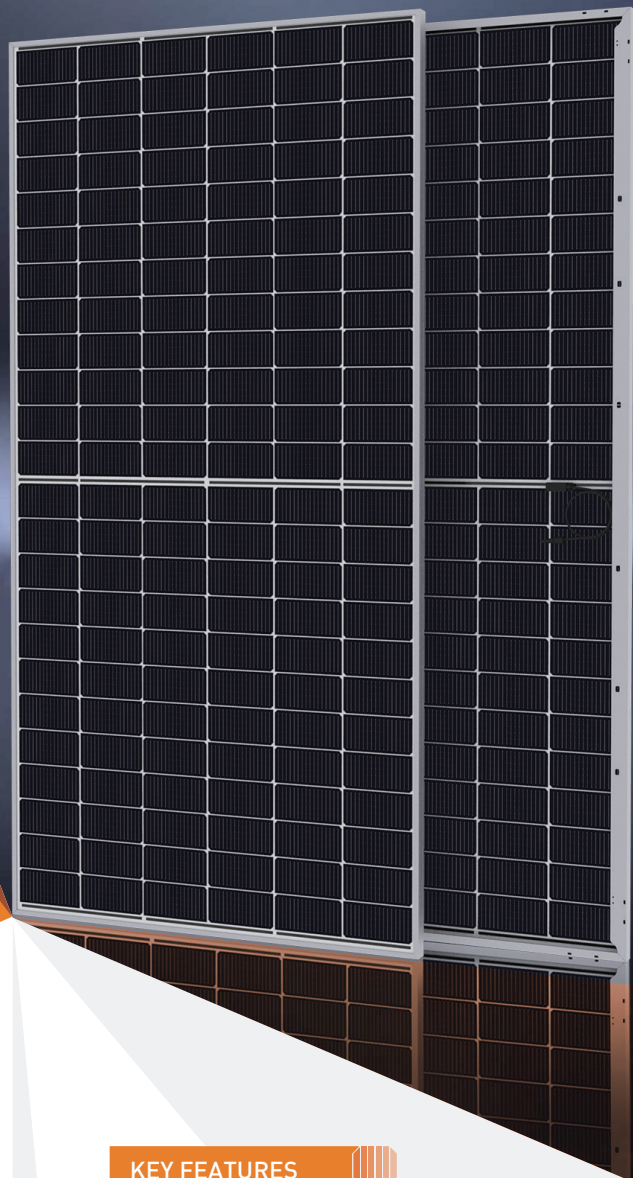
BIPRO

TM7G72M **144-cell**

580 - 600W

Bifacial Dual Glass

16BB Half-cut N-type

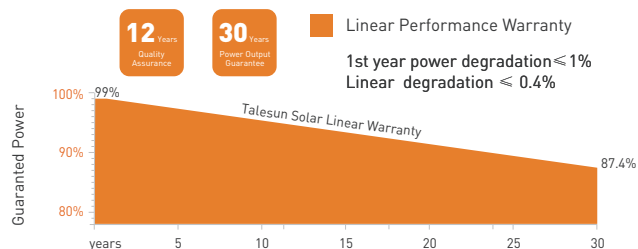


SYSTEM & PRODUCT CERTIFICATES

- 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 degradation and better low light performance



Industry Leading High Yield

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



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 2025.04.15

Suzhou Talesun Solar Technologies Co., Ltd.

TM7G72M - XXX (XXX represents Pmax at STC)

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum Power (Pmax/W)	580	638	585	644	590	649	595	655	600	660
Operating Voltage (Vmpp/V)	44.02	44.02	44.22	44.22	44.43	44.43	44.63	44.63	44.83	44.83
Operating Current (Impp/A)	13.18	14.50	13.23	14.55	13.28	14.61	13.33	14.66	13.39	14.73
Open-Circuit Voltage (Voc/V)	51.95	52.16	52.17	52.38	52.38	52.59	52.59	52.80	52.80	53.01
Short-Circuit Current (Isc/A)	13.84	15.22	13.89	15.28	13.94	15.33	13.99	15.39	14.04	15.44
Module Efficiency [%]	22.50		22.60		22.80		23.00		23.20	

STC: Irradiance 1000W/m², Spectra at AM1 5, Module Temperature 25℃.Power output tolerance:0~+5W ,Test uncertainty for Pmax/Voc/Isc:±3%±5%±5%
BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25℃, AM=1.5

REAR SIDE POWER GAIN(REFERENCE TO 590W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	620	649	679	708	738
Vmpp/V	44.43	44.43	44.43	44.43	44.43
Impp/A	13.94	14.61	15.27	15.94	16.60
Voc/V	52.38	52.38	52.38	52.38	52.38
Isc/A	14.64	15.33	16.03	16.73	17.43

MECHANICAL CHARACTERISTICS

Cell Type	N-type Mono-Crystallin (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	4mm²(IEC),12AWG(UL) 350mm(+),250mm(-) or Customized Length
Connectors	TALESUN(T01) Staubli(PV-KST4-EVO2A/XY,PV-KBT4-EVO2A/XY)

APPLICATION CONDITIONS

Maximun System Voltage	1500V DC
Operating Temperature	-40℃~+85℃
Maximun Series Fuse	30A
Safety Protection Class	Class II
Test Mechanical load*	Front side +5400Pa, Back side -2400Pa
Refer. Bifaciality Factor	φVoc:98±5%,φIsc: 80±5%,φPmax: 80±5%
Fire Rating	Class C
[T98]max	70℃

*Refer to the installation manual for details

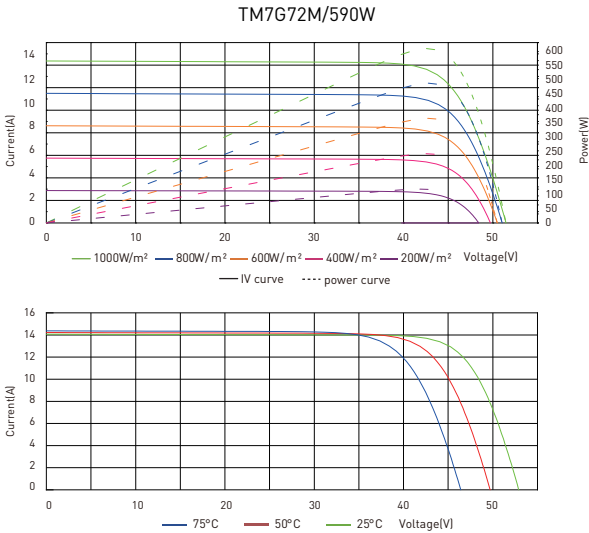
TEMPERATURE CHARACTERISTICS

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

PACKING CONFIGURATION

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

Electrical Performance



TECHNICAL DRAWINGS

