

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

[www.alesun.com](http://www.alesun.com)

[marketing.hq@alesun.com](mailto:marketing.hq@alesun.com)

\* GL-EN-Version 2026.02.13

Suzhou Talesun Solar Technologies Co.,Ltd.

**TM7G72M - XXX (XXX represents Pmax at STC )**  
**ELECTRICAL CHARACTERISTICS**

| Testing Condition             | 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/m<sup>2</sup>, Spectra at AM1.5, Module Temperature 25°C. Power output tolerance: 0~+5W, Test uncertainty for Pmax/Voc/Isc: ±3%±5%±5%  
 BNPI: Irradiance: front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

**REAR SIDE POWER GAIN(REFERENCE TO 590W FRONT)**

|           | 5%    | 10%   | 15%   | 20%   | 25%   |
|-----------|-------|-------|-------|-------|-------|
| 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     | 4mm <sup>2</sup> (IEC), 12AWG(UL)<br>350mm(+), 250mm(-) or Customized Length |
| Connectors        | TALESUN(T01)<br>Staubli(PV-KST4-EVO2A/XY, PV-KBT4-EVO2A/XY)                  |

**APPLICATION CONDITIONS**

|                           |  |
|---------------------------|--|
| Maximum System Voltage    | 1500V DC                               |
| Operating Temperature     | -40°C~+85°C                            |
| Maximum 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°C                                   |

\*Refer to the installation manual for details

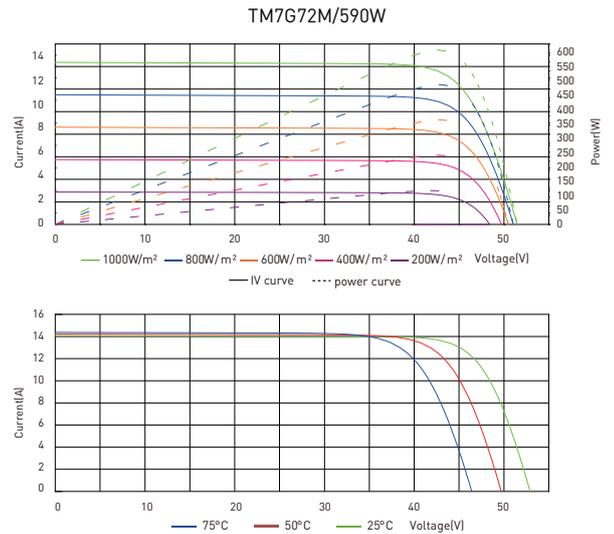
**TEMPERATURE CHARACTERISTICS**

|  |            |
|--|------------|
| 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           | 37  |
| Pieces Per Container(40'HQ) | 740 |

**Electrical Performance**



**TECHNICAL DRAWINGS**

