



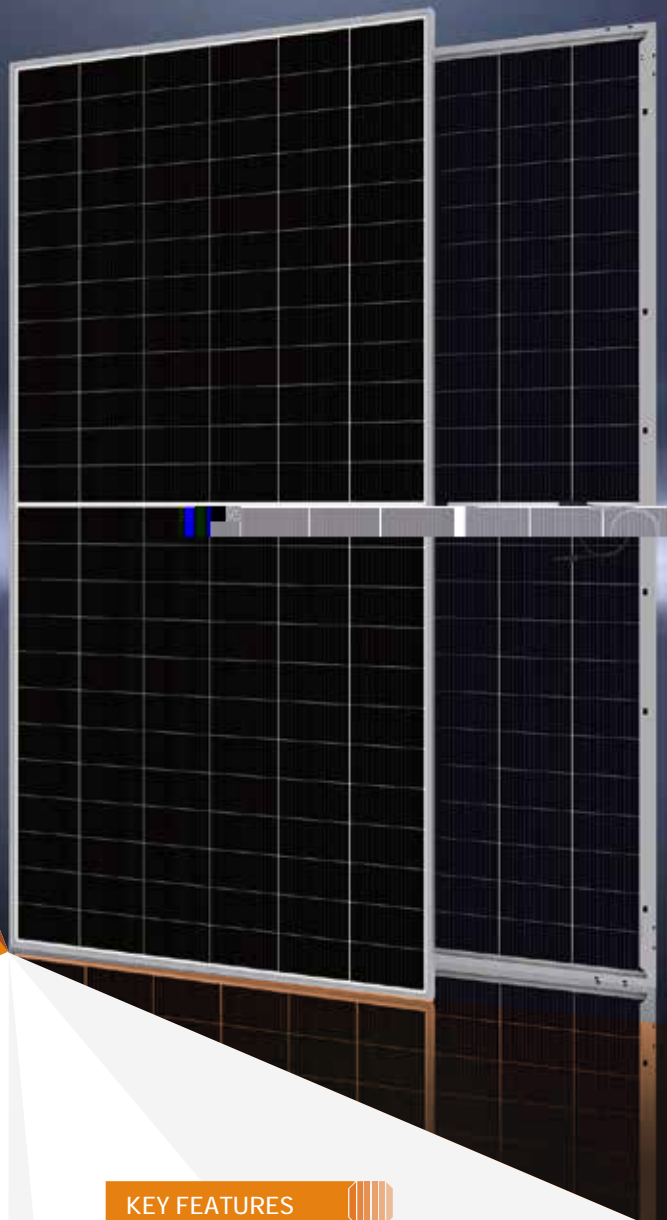
# BIPRO

TM9G72M **144-cell**

600 - 620W

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

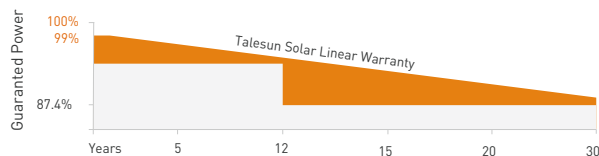


## PERFORMANCE WARRANTY

12 Years  
Quality Assurance

30 Years  
Power Output Guarantee

Linear Performance Warranty



## KEY FEATURES



### 16BB Half-cut Cell Technology

Lower LID/LeTID degradation and better low light performance  
Attenuation < 1% (1st year) / ≤ 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 2024.05.24

## ELECTRICAL CHARACTERISTICS

| Testing Condition             | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W)        | 600   | 451   | 605   | 455   | 610   | 459   | 615   | 463   | 620   | 466   |
| Operating Voltage (Vmpp/V)    | 43.20 | 40.66 | 43.37 | 40.82 | 43.54 | 40.98 | 43.71 | 41.14 | 43.88 | 41.30 |
| Operating Current (Impp/A)    | 13.88 | 11.10 | 13.95 | 11.15 | 14.01 | 11.19 | 14.06 | 11.24 | 14.12 | 11.29 |
| Open-Circuit Voltage (Voc/V)  | 51.40 | 48.82 | 51.60 | 49.01 | 51.80 | 49.20 | 52.00 | 49.39 | 52.20 | 49.58 |
| Short-Circuit Current (Isc/A) | 14.65 | 11.82 | 14.71 | 11.88 | 14.79 | 11.94 | 14.86 | 11.99 | 14.92 | 12.05 |
| Module Efficiency (%)         | 22.20 |       | 22.40 |       | 22.60 |       | 22.80 |       | 23.00 |       |

STC: Irradiance 1000W/m<sup>2</sup>, Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3%  
 NMOT: Irradiance 800W/m<sup>2</sup>, Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

## REAR SIDE POWER GAIN(REFERENCE TO 605W FRONT)

| Pmax gain | 5%    | 10%   | 15%   | 20%   | 25%   |
|-----------|-------|-------|-------|-------|-------|
| Pmax/W    | 635   | 666   | 696   | 726   | 756   |
| Vmpp/V    | 43.36 | 43.36 | 43.36 | 43.36 | 43.36 |
| Impp/A    | 14.65 | 15.35 | 16.04 | 16.74 | 17.44 |
| Voc/V     | 51.60 | 51.60 | 51.60 | 51.60 | 51.60 |
| Isc/A     | 15.45 | 16.18 | 16.92 | 17.65 | 18.39 |

## MECHANICAL CHARACTERISTICS

|                   |  |
|-------------------|--|
| Cell Type         | N-type Mono-Crystallin (16Busbar)  |
| No. of Cells      | 144pcs in series (6*24)  |
| Module Dimensions | 2382*1134*30mm (93.78*44.65*1.18inches)                                      |
| Weight            | 33.8kg (74.52lbs.)   |
| 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        | T01/LJQ-3-CSY/MC4/MC4-EV02   |

## APPLICATION CONDITIONS

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

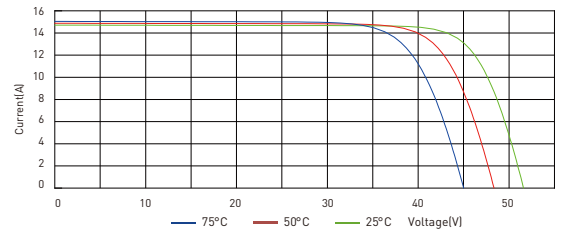
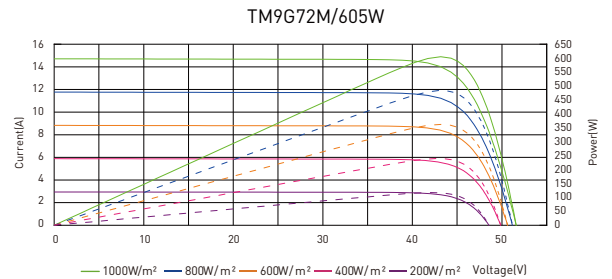
## TEMPERATURE CHARACTERISTICS

|  |            |
|--|------------|
| 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     |

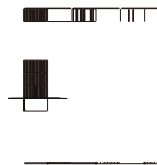
## PACKING CONFIGURATION

|                             |     |         |
|-----------------------------|-----|---------|
| Pieces Per Pallet           | 36  | 36(USA) |
| Pieces Per Container(40'HQ) | 720 | 540     |

## Electrical Performance



## TECHNICAL DRAWINGS



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