

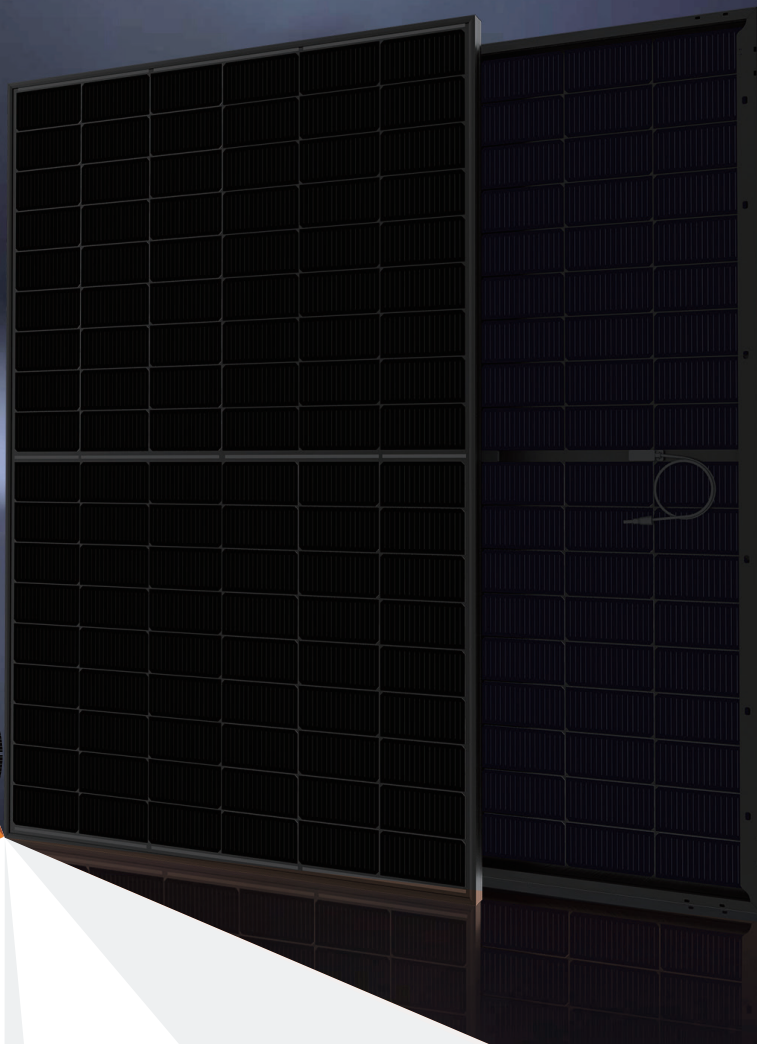


# BIPRO

TM7G54M **108-cell**

**435 - 455W**

Bifacial Dual Glass  
Full Black

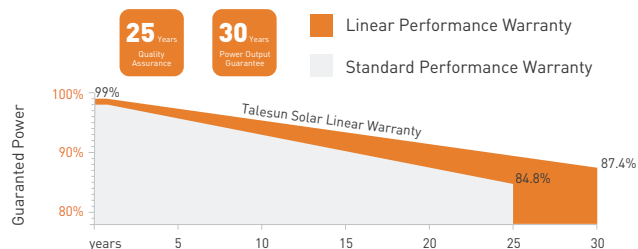


## SYSTEM & PRODUCT CERTIFICATES

- 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 N-type 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 2025.05.15

## ELECTRICAL CHARACTERISTICS

| Testing Condition             | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W)        | 435   | 323   | 440   | 334   | 445   | 338   | 450   | 341   | 455   | 345   |
| Operating Voltage (Vmpp/V)    | 32.81 | 31.30 | 32.94 | 31.50 | 33.07 | 31.70 | 33.20 | 31.90 | 33.32 | 32.10 |
| Operating Current (Impp/A)    | 13.26 | 10.54 | 13.36 | 10.59 | 13.46 | 10.64 | 13.56 | 10.69 | 13.66 | 10.74 |
| Open-Circuit Voltage (Voc/V)  | 39.15 | 37.10 | 39.30 | 37.20 | 39.45 | 37.30 | 39.60 | 37.40 | 39.75 | 37.50 |
| Short-Circuit Current (Isc/A) | 13.72 | 11.06 | 13.77 | 11.10 | 13.82 | 11.14 | 13.87 | 11.18 | 13.92 | 11.22 |
| Module Efficiency (%)         | 22.30 |       | 22.50 |       | 22.80 |       | 23.00 |       | 23.30 |       |

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 445W FRONT)

|           |       |       |       |       |       |
|-----------|-------|-------|-------|-------|-------|
| Pmax gain | 5%    | 10%   | 15%   | 20%   | 25%   |
| Pmax/W    | 467   | 490   | 512   | 534   | 556   |
| Vmpp/V    | 33.07 | 33.07 | 33.07 | 33.07 | 33.07 |
| Impp/A    | 14.51 | 15.20 | 15.89 | 16.58 | 17.28 |
| Voc/V     | 39.45 | 39.45 | 39.45 | 39.45 | 39.45 |
| Isc/A     | 14.13 | 14.81 | 15.48 | 16.15 | 16.83 |

## MECHANICAL CHARACTERISTICS

|                   |   |
|-------------------|---|
| Cell Type         | N-type Mono-Crystallin (16Busbar)                               |
| No. of Cells      | 108pcs in series (6*18)   |
| Module Dimensions | 1722*1134*30mm (67.80*44.65*1.18inches)                         |
| Weight            | 24.5kg (54.01lbs)   |
| Front Glass       | 2.0mm AR Coating Semi-tempered Glass                            |
| Back Glass        | 2.0mm Semi-tempered Glass                                       |
| Frame             | Anodized Aluminium Alloy  |
| Junction Box      | IP68, 3 Bypass Diodes   |
| Output Cables     | 4mm² (IEC), 12AWG(UL)<br>350mm(+),250mm(-) or Customized Length |
| Connectors        | MC4/MC4-EVO2A/0thers  |

## APPLICATION CONDITIONS

|                           |                                     |
|---------------------------|-------------------------------------|
| Maximum 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%                              |

\*Refer to the installation manual for details

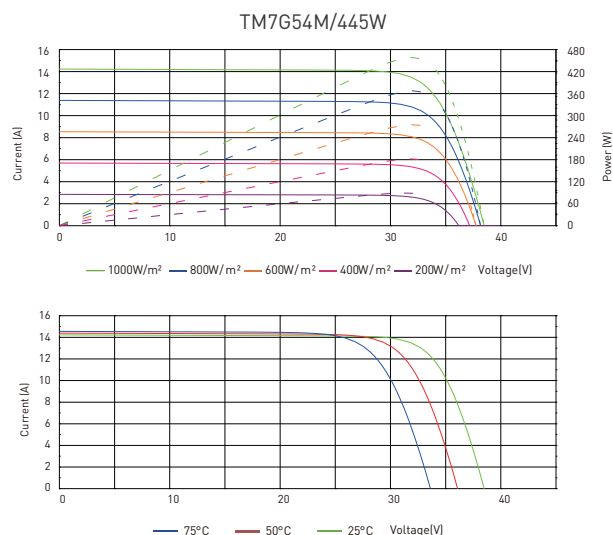
## TEMPERATURE CHARACTERISTICS

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

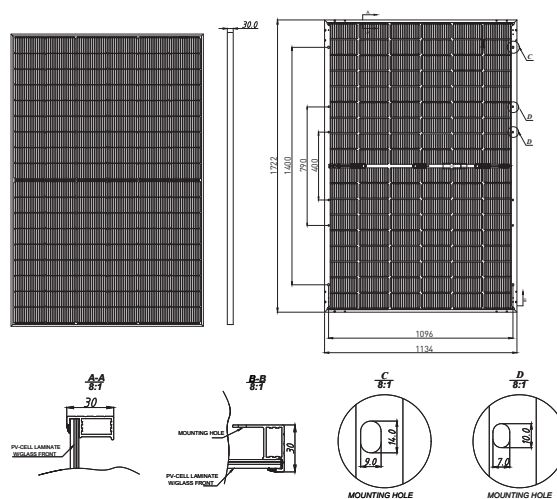
## PACKING CONFIGURATION

|                             |     |         |
|-----------------------------|-----|---------|
| Pieces Per Pallet           | 37  | 36(USA) |
| Pieces Per Container(40'HQ) | 962 | 720     |

## Electrical Performance



## TECHNICAL DRAWINGS



The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Suzhou Talesun Solar Technologies Co., Ltd. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.