

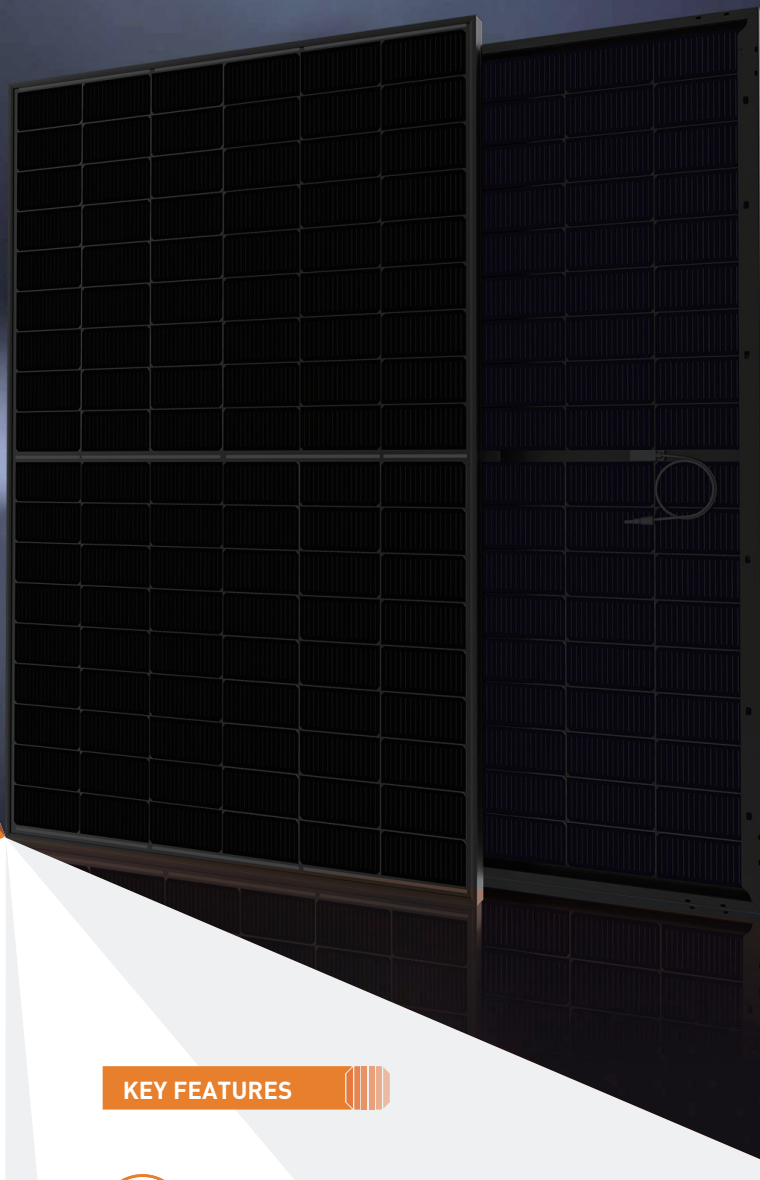
TALESUN

# BIPRO

TM7G54M **108-cell**

430 - 450W

Bifacial Dual Glass  
Full Black

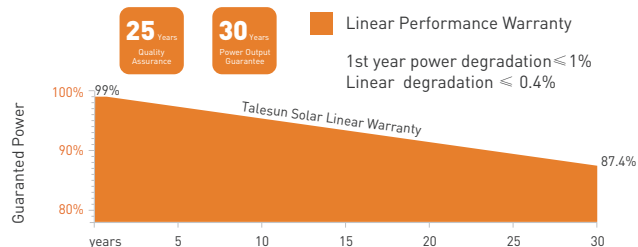


## SYSTEM & PRODUCT CERTIFICATES

- 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 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 2025.11.20

Suzhou Talesun Solar Technologies Co., Ltd.

TM7G54M - XXX (XXX represents Pmax at STC )

ELECTRICAL CHARACTERISTICS

| Testing Condition             | STC   | BNPI  | STC   | BNPI  | STC   | BNPI  | STC   | BNPI  | STC   | BNPI  |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W)        | 430   | 473   | 435   | 479   | 440   | 484   | 445   | 490   | 450   | 495   |
| Operating Voltage (Vmpp/V)    | 32.68 | 32.68 | 32.81 | 32.81 | 32.94 | 32.94 | 33.07 | 33.07 | 33.20 | 33.20 |
| Operating Current (Impp/A)    | 13.16 | 14.48 | 13.26 | 14.59 | 13.36 | 14.70 | 13.46 | 14.81 | 13.56 | 14.92 |
| Open-Circuit Voltage (Voc/V)  | 39.00 | 39.16 | 39.15 | 39.31 | 39.30 | 39.46 | 39.45 | 39.61 | 39.60 | 39.76 |
| Short-Circuit Current (Isc/A) | 13.67 | 15.04 | 13.72 | 15.09 | 13.77 | 15.15 | 13.82 | 15.20 | 13.87 | 15.26 |
| Module Efficiency [%]         | 22.00 |       | 22.30 |       | 22.50 |       | 22.80 |       | 23.00 |       |

STC: Irradiance 1000W/m², 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/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

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-Crystalline (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 Glazed 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-EV02A/Others  |

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

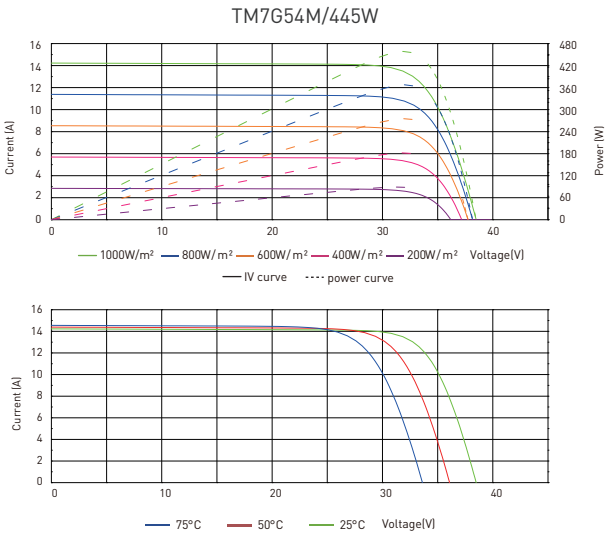
TEMPERATURE CHARACTERISTICS

|  |            |
|--|------------|
| 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) | 962 |

Electrical Performance



TECHNICAL DRAWINGS

