



# BIPRO

TP7G54M  
TP7G54M(H) **108-cell**

**390 - 410W**

Bifacial Module With Transparent Backsheet

10BB Half-cut Mono Perc



## SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61703
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



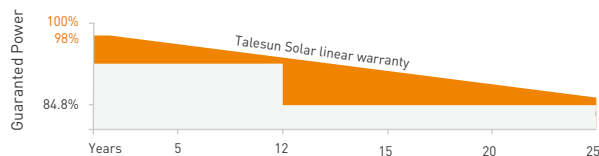
## PERFORMANCE WARRANTY

**12** Years  
Quality Assurance

**25** Years  
Power Output Guarantee

Linear Performance Warranty

Standard Performance Warranty



## KEY FEATURES



### 10BB Half-cut Cell Technology

New circuit design, lower internal current, lower  $R_s$  loss  
Ga doped wafer, attenuation  $< 2\%$  (1st year) /  $\leq 0.55\%$  (Linear)



### Industry Leading High Yield

Bifacial PERC cell technology,  
5%-25% more yield depends on different conditions



### Excellent Anti-PID Performance

2 times of industry standard Anti-PID test by TUV SUD



### Lower LCOE

2% more power generation, lower LCOE



### IP68 Junction Box

High waterproof level

## ELECTRICAL CHARACTERISTICS

| Testing Condition             | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W)        | 390   | 291   | 395   | 294   | 400   | 298   | 405   | 302   | 410   | 306   |
| Operating Voltage (Vmpp/V)    | 30.65 | 28.6  | 30.85 | 28.8  | 31.05 | 29.0  | 31.24 | 29.2  | 31.43 | 29.3  |
| Operating Current (Impp/A)    | 12.73 | 10.18 | 12.81 | 10.23 | 12.89 | 10.30 | 12.97 | 10.36 | 13.05 | 10.42 |
| Open-Circuit Voltage (Voc/V)  | 36.50 | 34.4  | 36.75 | 34.6  | 37.00 | 34.8  | 37.25 | 35.1  | 37.50 | 35.3  |
| Short-Circuit Current (Isc/A) | 13.61 | 10.97 | 13.69 | 11.04 | 13.78 | 11.11 | 13.86 | 11.17 | 13.94 | 11.24 |
| Module Efficiency (%)         | 20.00 |       | 20.20 |       | 20.50 |       | 20.70 |       | 21.00 |       |

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 410W FRONT)

|           |       |       |       |       |       |
|-----------|-------|-------|-------|-------|-------|
| Pmax gain | 5%    | 10%   | 15%   | 20%   | 25%   |
| Pmax/W    | 431   | 451   | 472   | 492   | 513   |
| Vmpp/V    | 31.43 | 31.43 | 31.43 | 31.43 | 31.43 |
| Impp/A    | 13.70 | 14.36 | 15.01 | 15.66 | 16.31 |
| Voc/V     | 37.50 | 37.50 | 37.50 | 37.50 | 37.50 |
| Isc/A     | 14.65 | 15.35 | 16.04 | 16.74 | 17.44 |

## MECHANICAL CHARACTERISTICS

|                   |   |
|-------------------|---|
| Solar Cell        | Monocrystalline 182*182mm   |
| No. of Cells      | 108 (6*18)  |
| Module Dimensions | 1722*1134*30mm<br>(67.80*44.65*1.18inches)                                |
| Weight            | 21.5kg (47.4lbs.)   |
| Front Glass       | 3.2mm AR Coating Tempered Glass   |
| Frame             | Anodized Aluminium Alloy  |
| Junction Box      | IP68, 3 Bypass Diodes   |
| Output Cables     | 4mm <sup>2</sup> (IEC), 12AWG(UL)<br>300mm in Length or Customized Length |
| Connectors        | T01/LJQ-3-CSY/MC4/MC4-EV02  |

## APPLICATION CONDITIONS

|                           |                                     |
|---------------------------|-------------------------------------|
| Maximum System Voltage    | 1000V/1500VDC/(IEC)                 |
| Operating Temperature     | -40°C~+85°C                         |
| Maximum Series Fuse       | 30A                                 |
| Safety Protection Class   | Class II                            |
| Mechanical Load           | Front side 5400Pa, Back side 2400Pa |
| Refer. Bifaciality Factor | 70%(+5%~-10%)                       |

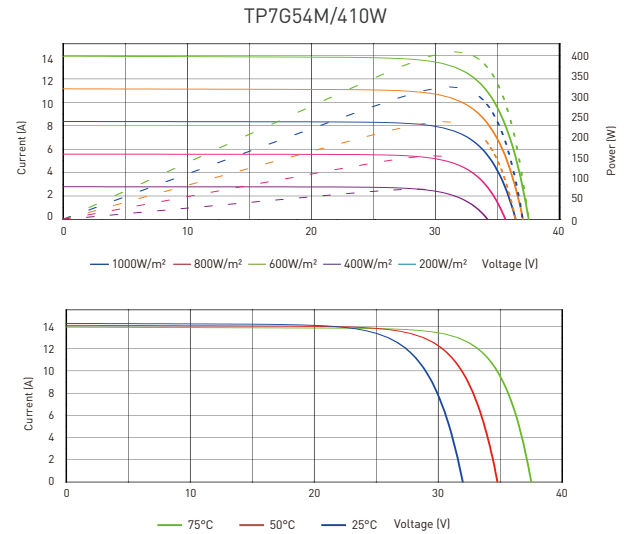
## TEMPERATURE CHARACTERISTICS

|  |            |
|--|------------|
| Temperature Coefficient of Pmax            | -0.35%/°C  |
| Temperature Coefficient of Voc             | -0.26%/°C  |
| Temperature Coefficient of Isc             | +0.048%/°C |
| Nominal Module Operating Temperature(NMOT) | 43±2°C     |

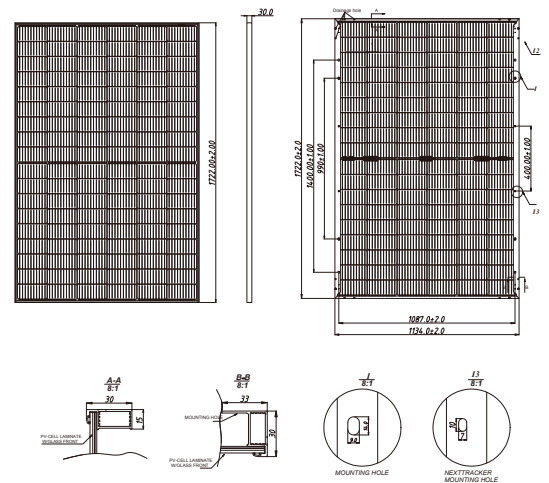
## PACKING CONFIGURATION

|                             |     |         |
|-----------------------------|-----|---------|
| Pieces Per Pallet           | 36  | 36(USA) |
| Pieces Per Container(40'HQ) | 936 | 828     |

## I-V CURVE



## TECHNICAL DRAWINGS



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