



BISTAR

TP8F54M
TP8F54M(H) **108-cell**

540 - 560W

12BB Half-cut Mono Perc



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

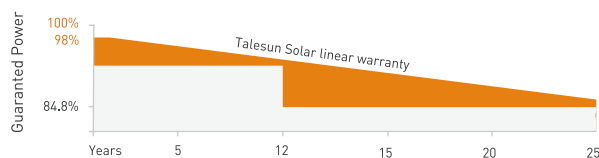


PERFORMANCE WARRANTY

12 Years
Quality Assurance

25 Years
Power Output Guarantee

Linear Performance Warranty



KEY FEATURES



12BB Half-cut Cell Technology

New circuit design, lower internal current, lower Rs loss
Ga doped wafer, attenuation <2% (1st year) / ≤0.55% (Linear)



Significantly Lower the Risk of Hot Spot

Special circuit design with much lower hot spot temperature



Lower LCOE

2% more power generation, lower LCOE



Excellent Anti-PID Performance

2 times of industry standard Anti-PID test



IP68 Junction Box

High waterproof level

www.talesun.com

marketing.hq@talesun.com

* GL-EN-Version 2023.10.20

ELECTRICAL CHARACTERISTICS

| Testing Condition | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W) | 540 | 409 | 545 | 413 | 550 | 417 | 555 | 421 | 560 | 425 |
| Operating Voltage (Vmpp/V) | 31.20 | 29.30 | 31.40 | 29.40 | 31.60 | 29.60 | 31.80 | 29.80 | 32.00 | 30.00 |
| Operating Current (Impp/A) | 17.31 | 13.99 | 17.36 | 14.04 | 17.41 | 14.08 | 17.46 | 14.12 | 17.51 | 14.15 |
| Open-Circuit Voltage (Voc/V) | 37.40 | 35.40 | 37.60 | 35.60 | 37.80 | 35.70 | 38.00 | 35.90 | 38.20 | 36.10 |
| Short-Circuit Current (Isc/A) | 18.39 | 14.82 | 18.44 | 14.86 | 18.49 | 14.90 | 18.54 | 14.94 | 18.58 | 14.97 |
| Module Efficiency (%) | 21.10 | | 21.30 | | 21.50 | | 21.70 | | 21.90 | |

STC: Irradiance 1000W/m², Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3%
 NMOT: Irradiance 800W/m², Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

MECHANICAL CHARACTERISTICS

| | |
|-------------------|---|
| Cell Type | Monocrystalline Silicon (12Busbar) |
| No. of Cells | 108pcs in series (6*18) |
| Module Dimensions | 1961*1303*35mm (77.20*51.30*1.38inches) |
| Weight | 28.5kg (62.83lbs.) |
| Front Glass | 3.2mm AR Coating Tempered Glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68, 3 Bypass Diodes |
| Output Cables | 4mm ² (IEC), 12AWG(UL) 300mm in Length or Customized Length |
| Connectors | T01/LJQ-3-CSY/MC4/MC4-EV02 |

APPLICATION CONDITIONS

| | |
|------------------------------|----------------|
| Maximum System Voltage | 1000V/1500V/DC |
| Operating Temperature | -40°C~+85°C |
| Maximum Series Fuse | 30A |
| Safety Protection Class | Class II |
| Mechanical Load (Front side) | 5400Pa |
| Mechanical Load (Back side) | 2400Pa |

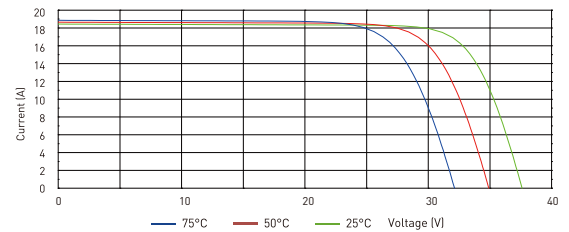
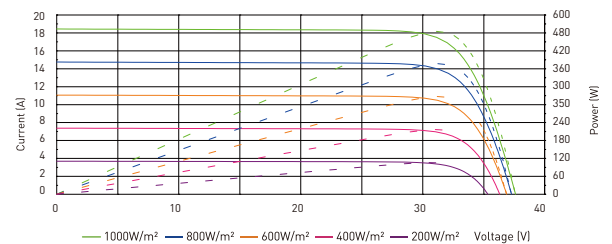
TEMPERATURE CHARACTERISTICS

| | |
|--|------------|
| Temperature Coefficient of Pmax | -0.34%/°C |
| Temperature Coefficient of Voc | -0.25%/°C |
| Temperature Coefficient of Isc | +0.046%/°C |
| Nominal Module Operating Temperature(NMOT) | 43±2°C |

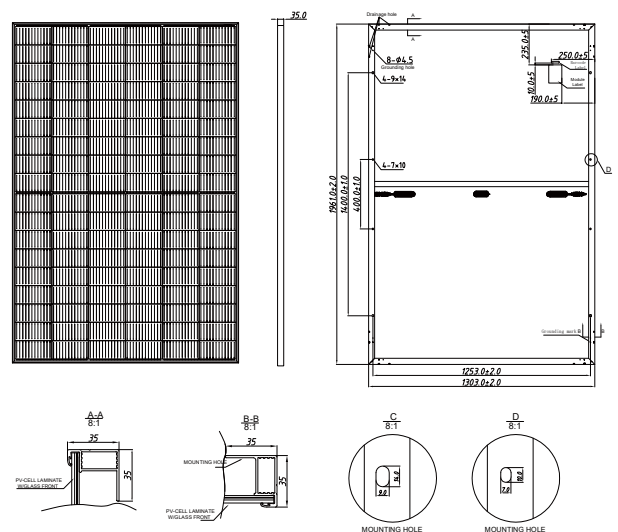
PACKING CONFIGURATION

| | | |
|-----------------------------|-----|---------|
| Pieces Per Pallet | 31 | 31(USA) |
| Pieces Per Container(40'HQ) | 558 | 558 |

I-V CURVE



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.