



BISTAR

TN7F54M
TN7F54M(H) **108-cell**

410 - 430W

16BB Half-cut Mono 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

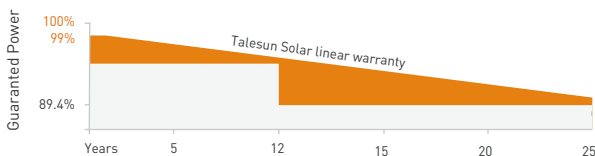


PERFORMANCE WARRANTY

12 Years
Quality Assurance

25 Years
Power Output Guarantee

Linear Performance Warranty



KEY FEATURES



16BB Half-cut Cell Technology

New circuit design, lower internal current, lower R_s loss
P doped wafer, attenuation <1% (1st year) / $\leq 0.4\%$ (Linear)



Significantly Lower the Risk of Hot Spot

Special circuit design with much lower hot spot temperature



Lower LCOE

3% more power generation, lower LCOE



Excellent Anti-PID Performance

2 times of industry standard Anti-PID test



IP68 Junction Box

High waterproof level

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	410	308	415	312	420	315	425	319	430	323
Operating Voltage (Vmpp/V)	31.14	29.60	31.33	29.80	31.51	29.90	31.70	30.10	31.88	30.30
Operating Current (Impp/A)	13.17	10.40	13.25	10.47	13.33	10.53	13.41	10.60	13.49	10.66
Open-Circuit Voltage (Voc/V)	37.73	35.80	37.92	36.00	38.11	36.20	38.30	36.30	38.49	36.50
Short-Circuit Current (Isc/A)	13.91	11.21	13.99	11.27	14.07	11.34	14.15	11.40	14.23	11.47
Module Efficiency (%)	21.00		21.26		21.51		21.77		22.02	

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	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	21.5kg (47.40lbs.)
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

Maximun System Voltage	1000V/1500V/DC
Operating Temperature	-40°C~+85°C
Maximun Series Fuse	25A
Safety Protection Class	Class II
Mechanical Load (Front side)	6000Pa
Mechanical Load (Back side)	3800Pa

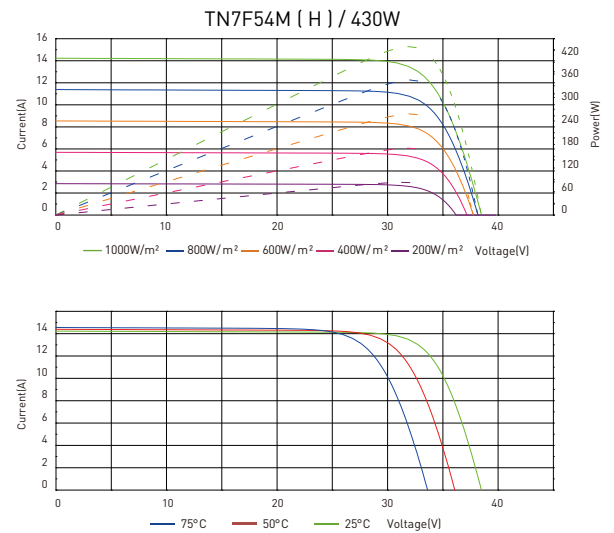
TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	-0.30%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.046%/°C
Nominal Module Operating Temperature(NMOT)	43±2°C

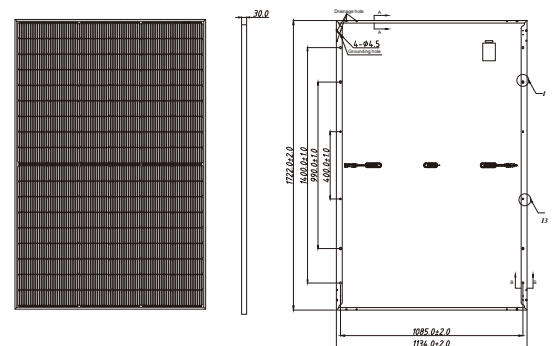
PACKING CONFIGURATION

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

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.