



# BISTAR

TN7F54M(H) **108-cell**

415 - 435W

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



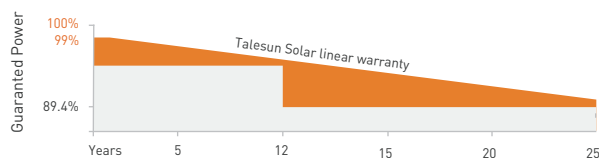
## PERFORMANCE WARRANTY

12 Years  
Quality Assurance

25 Years  
Power Output Guarantee

Linear Performance Warranty

Standard Performance Warranty



## KEY FEATURES



### 16BB Half-cut Cell Technology

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



### IP68 Junction Box

High waterproof level

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\* GL-EN-Version 2023.11.22

\* Made in China

## ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	415	312	420	315	425	319	430	323	435	327
Operating Voltage (Vmpp/V)	31.33	29.80	31.51	29.90	31.70	30.10	31.88	30.30	32.06	30.50
Operating Current (Impp/A)	13.25	10.47	13.33	10.53	13.41	10.60	13.49	10.66	14.31	10.72
Open-Circuit Voltage (Voc/V)	37.92	36.00	38.11	36.20	38.30	36.30	38.49	36.50	38.68	36.70
Short-Circuit Current (Isc/A)	13.99	11.27	14.07	11.34	14.15	11.40	14.23	11.47	14.31	11.54
Module Efficiency (%)	21.26		21.51		21.77		22.02		22.28	

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

## 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 <sup>2</sup> (IEC), 12AWG(UL) 300mm in Length or Customized Length
Connectors	T01/LJQ-3-CSY/PV-KST4&PV-KBT4 PV-KST4-EV02&PV-KBT4-EV02

## APPLICATION CONDITIONS

Maximum System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	25A
Safety Protection Class	Class II
Mechanical Load (Front side)	5400Pa
Mechanical Load (Back side)	2400Pa
Fire Class Rating	Class C

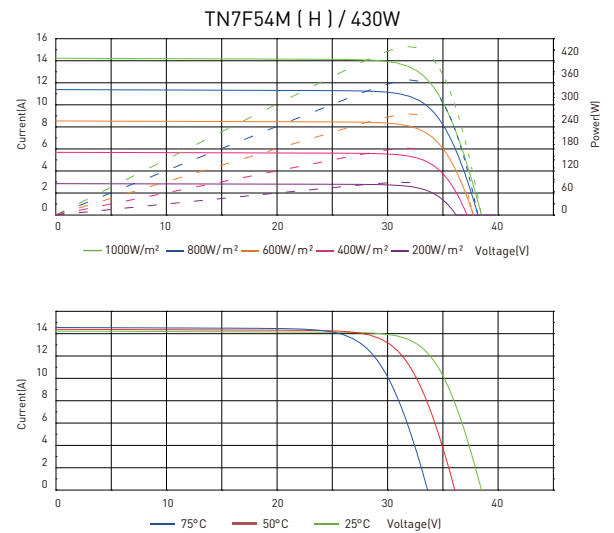
## TEMPERATURE CHARACTERISTICS

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

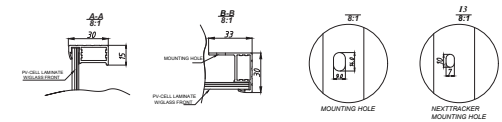
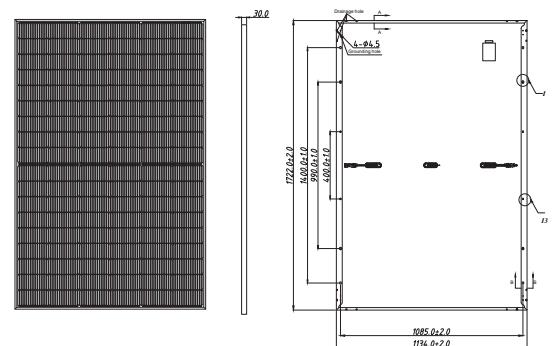
## PACKING CONFIGURATION

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

## I-V CURVE



## TECHNICAL DRAWINGS



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