



BIPRO

TM7G54M **108-cell**

415 - 435W

Bifacial Dual Glass

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



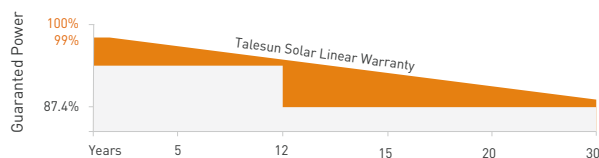
PERFORMANCE WARRANTY

12 Years
Quality Assurance

30 Years
Power Output Guarantee

Linear Performance Warranty

Standard Performance Warranty



KEY FEATURES



16BB Half-cut Cell Technology

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



Industry Leading High Yield

Bifacial TOPCon cell technology,
10%-30% more yield depends on different conditions



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 2023.11.10

* 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	13.57	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/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

REAR SIDE POWER GAIN(REFERENCE TO 430W FRONT)

Pmax gain	10%	15%	20%	25%	30%
Pmax/W	473	495	516	538	559
Vmpp/V	31.88	31.88	31.88	31.88	31.88
Impp/A	14.84	15.51	16.18	16.86	17.53
Voc/V	38.49	38.49	38.49	38.49	38.49
Isc/A	15.65	16.36	17.07	17.78	18.49

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	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	4mm ² (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

Maximun System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximun Series Fuse	30A
Safety Protection Class	Class II
Mechanical Load	Front side 5400Pa, Back side 2400Pa
Refer. Bifaciality Factor	80%±5%
Fire Class Rating	Class C

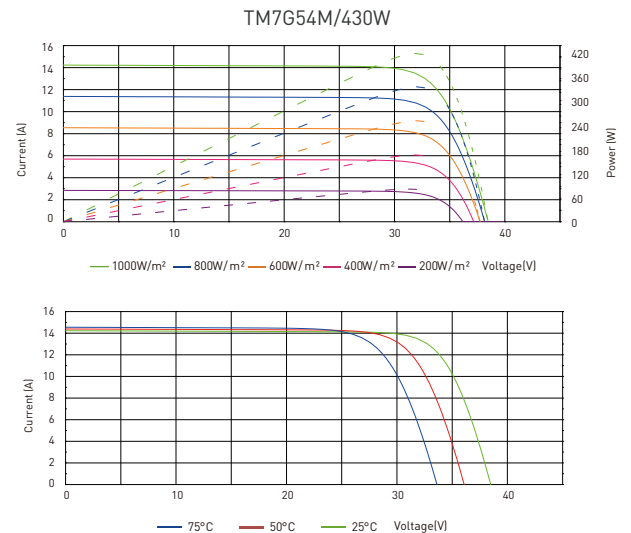
TEMPERATURE CHARACTERISTICS

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

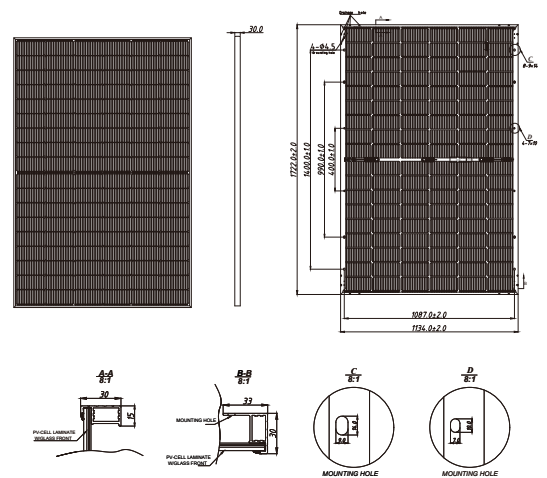
PACKING CONFIGURATION

Pieces Per Pallet	36	36(USA)
Pieces Per Container(40'HQ)	936	720

I-V CURVE



TECHNICAL DRAWINGS



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