



BIPRO

TM7G54M **108-cell**

415 - 435W

16BB Half-cut N-type
Full Black

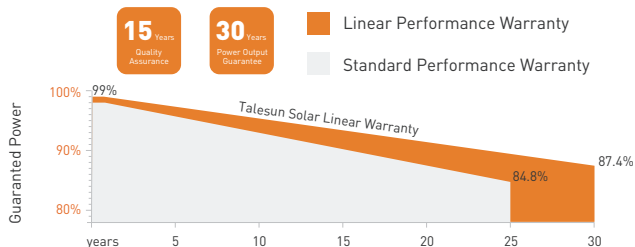


SYSTEM & PRODUCT CERTIFICATES

- 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



KEY FEATURES



16BB Half-cut Cell Technology

Lower LID/LeTID degradation and better low light performance
Attenuation $\leq 1\%$ (1st year) / $\leq 0.4\%$ (Linear)



Industry Leading High Yield

Bifacial TOPCon cell technology,
Dual-sided power generation gain from back side depending on albedo, significantly reduce LCOE



Excellent Anti-PID Performance

192 hours Anti-PID test



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 2024.04.10

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	415	316	420	319	425	323	430	326	435	330
Operating Voltage (Vmpp/V)	32.29	30.50	32.42	30.70	32.55	30.90	32.68	31.10	32.81	31.30
Operating Current (Impp/A)	12.86	10.34	12.96	10.39	13.06	10.44	13.16	10.49	13.26	10.54
Open-Circuit Voltage (Voc/V)	38.55	36.60	38.70	36.70	38.85	36.80	39.00	37.00	39.15	37.10
Short-Circuit Current (Isc/A)	13.52	10.91	13.57	10.95	13.62	10.98	13.67	11.02	13.72	11.06
Module Efficiency [%]	21.30		21.50		21.80		22.00		22.30	

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 425W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	446	468	489	510	531
Vmpp/V	31.70	31.70	31.70	31.70	31.70
Impp/A	14.08	14.75	15.42	16.09	16.76
Voc/V	38.30	38.30	38.30	38.30	38.30
Isc/A	14.94	15.65	16.36	17.07	17.79

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) 350mm(+),250mm(-) or Customized Length
Connectors	T01/LJQ-3-CSY/MC4/MC4-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%

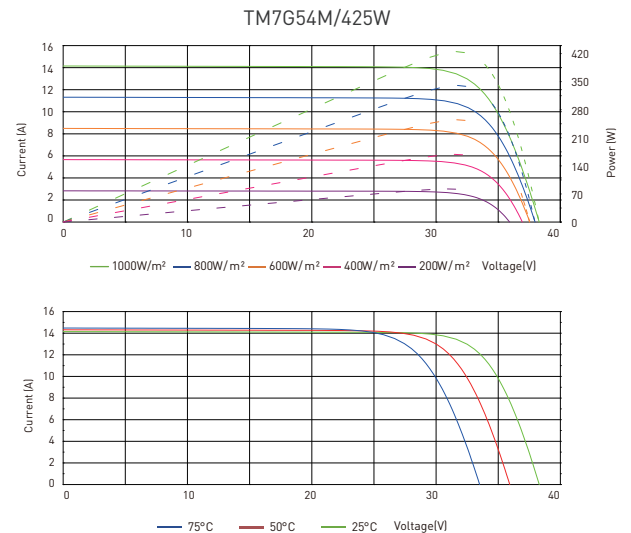
TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	+0.043%/°C
Nominal Module Operating Temperature(NMOT)	43±2°C

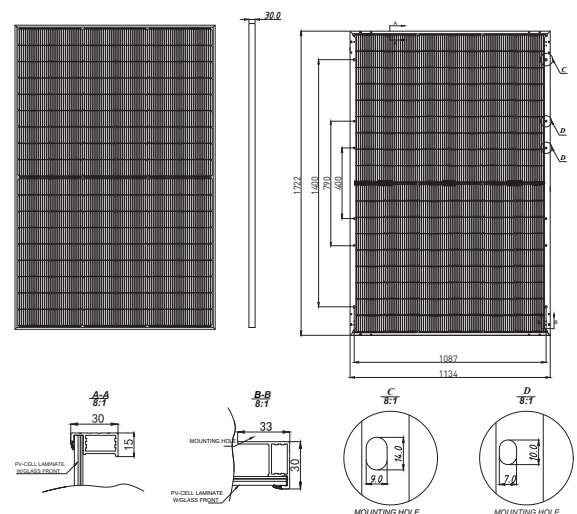
PACKING CONFIGURATION

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

Electrical Performance



TECHNICAL DRAWINGS



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