TALESUN

BIPRO

TM7G54M 108-cell

435 - 455W

Bifacial Dual Glass
Full Black

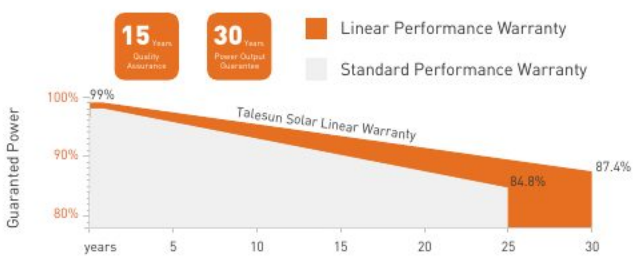


SYSTEM & PRODUCT CERTIFICATES

- 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

c UL us LISTED CE DEKRA

PERFORMANCE WARRANTY



KEY FEATURES

16BB Half-cut Cell Technology

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

Industry Leading High Yield

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

Excellent Anti-PID Performance

PID Anti

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 2025.05.15

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	435	323	440	334	445	338	450	341	455	345
Operating Voltage (Vmpp/V)	32.81	31.30	32.94	31.50	33.07	31.70	33.20	31.90	33.32	32.10
Operating Current (Impp/A)	13.26	10.54	13.36	10.59	13.46	10.64	13.56	10.69	13.66	10.74
Open-Circuit Voltage (Voc/V)	39.15	37.10	39.30	37.20	39.45	37.30	39.60	37.40	39.75	37.50
Short-Circuit Current (Isc/A)	13.72	11.06	13.77	11.10	13.82	11.14	13.87	11.18	13.92	11.22
Module Efficiency (%)	22.30		22.50		22.80		23.00		23.30	

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

REAR SIDE POWER GAIN(REFERENCE TO 445W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	467	490	512	534	556
Vmpp/V	33.07	33.07	33.07	33.07	33.07
Impp/A	14.51	15.20	15.89	16.58	17.28
Voc/V	39.45	39.45	39.45	39.45	39.45
Isc/A	14.13	14.81	15.48	16.15	16.83

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	4mm² (IEC), 12AWG(UL) 350mm(+),250mm(-) or Customized Length
Connectors	MC4/MC4-EVO2A/Others

APPLICATION CONDITIONS

Maximum 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%

*Refer to the installation manual for details

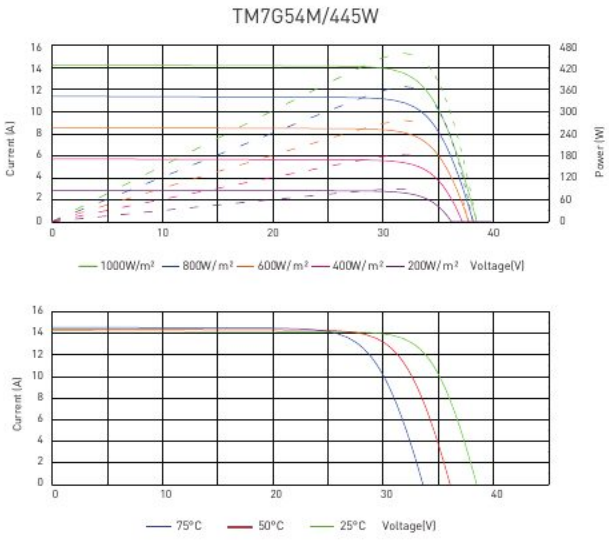
TEMPERATURE CHARACTERISTICS

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

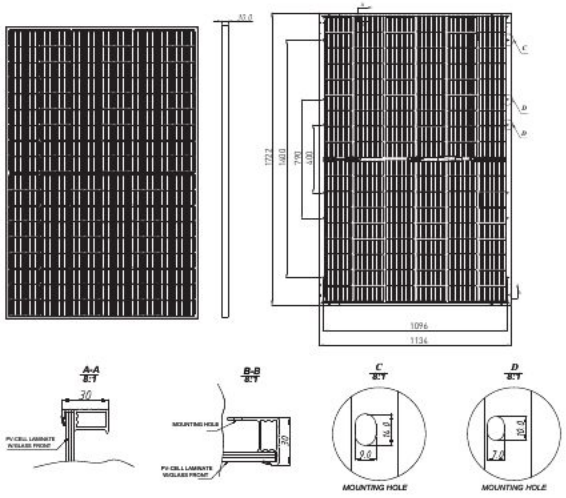
PACKING CONFIGURATION

Pieces Per Pallet	37	36(USA)
Pieces Per Container(40'HQ)	962	720

Electrical Performance



TECHNICAL DRAWINGS



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