



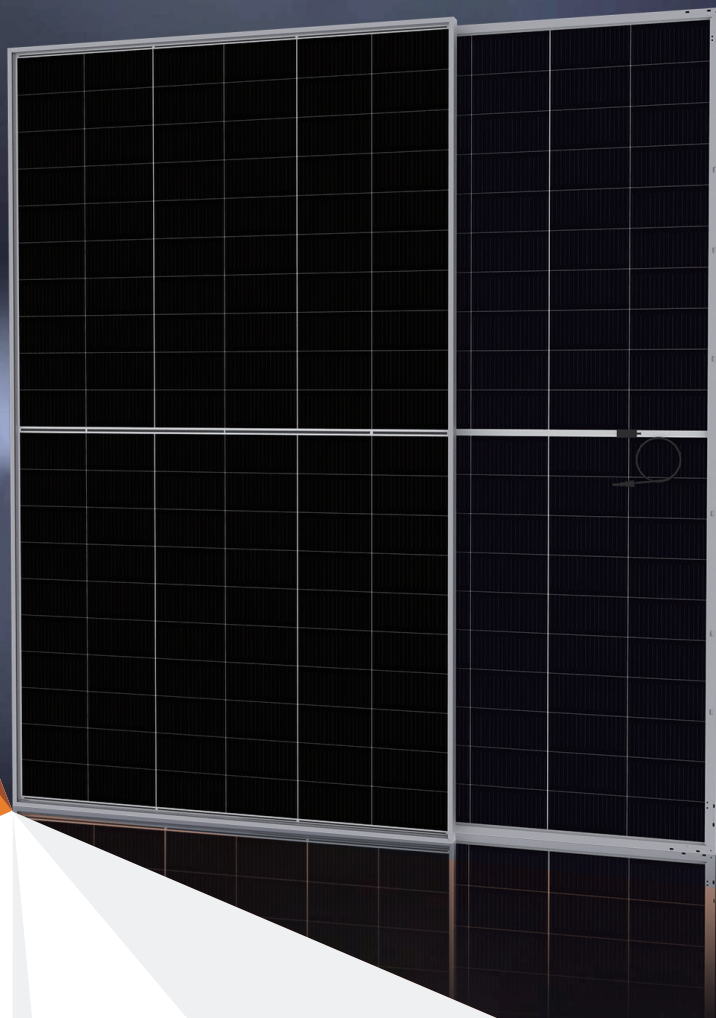
BIPRO

TM8G60M **120-cell**

640 - 660W

Bifacial Dual Glass

18BB Half-cut N-type

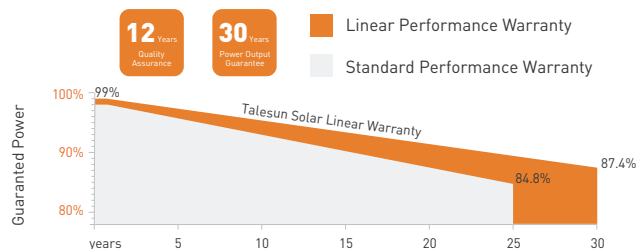


SYSTEM & PRODUCT CERTIFICATES

- 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



KEY FEATURES



18BB 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 N-type 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

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	640	490	645	493	650	497	655	501	660	505
Operating Voltage (Vmpp/V)	37.00	35.00	37.20	35.20	37.40	35.40	37.60	35.60	37.80	35.80
Operating Current (Impp/A)	17.30	14.00	17.34	14.03	17.38	14.05	17.43	14.06	17.46	14.11
Open-Circuit Voltage (Voc/V)	44.50	42.20	44.80	42.50	45.10	42.80	45.40	43.10	45.70	43.40
Short-Circuit Current (Isc/A)	18.30	14.75	18.33	14.77	18.36	14.80	18.39	14.82	18.42	14.85
Module Efficiency [%]	22.60		22.80		23.00		23.10		23.30	

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 645W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	677	710	742	774	806
Vmpp/V	37.20	37.20	37.20	37.20	37.20
Impp/A	18.21	19.07	19.94	20.81	21.68
Voc/V	44.80	44.80	44.80	44.80	44.80
Isc/A	19.25	20.16	21.08	22.00	22.91

MECHANICAL CHARACTERISTICS

Cell Type	N-type Mono-Crystalline (18Busbar)
No. of Cells	120pcs in series (6*20)
Module Dimensions	2172*1303*33mm (85.51*51.30*1.30inches)
Weight	34.9kg (76.94lbs.)
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) 350(+),280(-)mm in Length or Customized Length
Connectors	MC4/MC4-EVO2A/Others

APPLICATION CONDITIONS

Maximum System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	35A
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

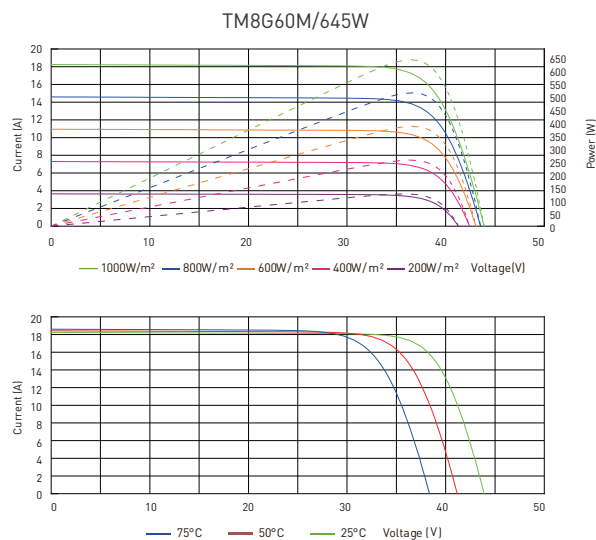
TEMPERATURE CHARACTERISTICS

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

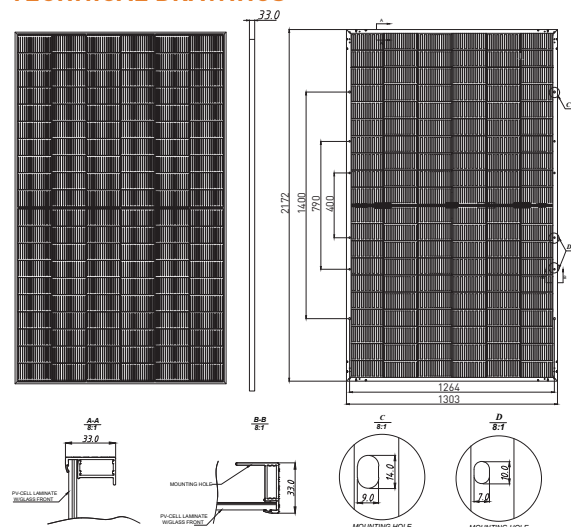
PACKING CONFIGURATION

Pieces Per Pallet	33	33(USA)
Pieces Per Container(40'HQ)	594	528

Electrical Performance



TECHNICAL DRAWINGS



TALESUN

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