

TALESUN

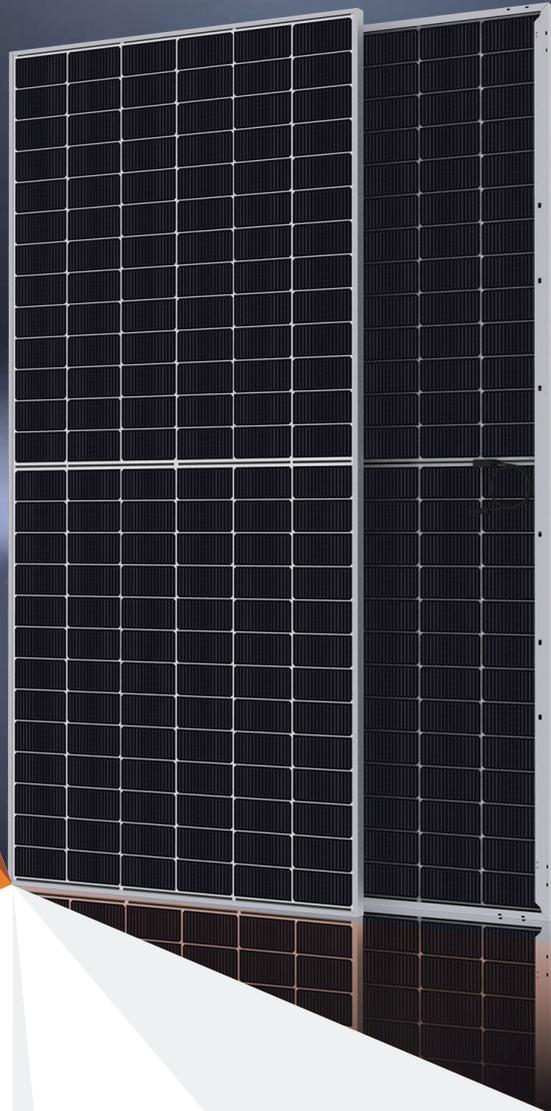
BIPRO

TM7G78M **156-cell**

630 - 650W

Bifacial Dual Glass

16BB 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



16BB Half-cut Cell Technology

Lower LID degradation and better low light performance



Industry Leading High Yield

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



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 2026.02.13

Suzhou Talesun Solar Technologies Co.,Ltd.

TM7G78M - XXX(XXX represents Pmax at STC) ELECTRICAL CHARACTERISTICS

Testing Condition	STC	BNPI								
Maximum Power (Pmax/W)	630	693	635	699	640	704	645	710	650	715
Operating Voltage (Vmpp/V)	47.80	47.80	47.97	47.97	48.15	48.15	48.32	48.32	48.53	48.53
Operating Current (Impp/A)	13.18	14.50	13.24	14.56	13.30	14.63	13.35	14.69	13.40	14.74
Open-Circuit Voltage (Voc/V)	56.37	56.60	56.55	56.78	56.73	56.96	56.92	57.15	57.10	57.33
Short-Circuit Current (Isc/A)	13.84	15.22	13.89	15.28	13.94	15.33	13.99	15.39	14.04	15.44
Module Efficiency (%)	22.50		22.70		22.90		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/Voc/Isc: ±3%±5%±5%
BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

REAR SIDE POWER GAIN(REFERENCE TO 640W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	672	704	736	768	800
Vmpp/V	48.15	48.15	48.15	48.15	48.15
Impp/A	13.97	14.63	15.30	15.96	16.63
Voc/V	56.73	56.73	56.73	56.73	56.73
Isc/A	14.64	15.33	16.03	16.73	17.43

MECHANICAL CHARACTERISTICS

Cell Type	N-type Mono-Crystallin (16Busbar)
No. of Cells	156pcs in series (6*26)
Module Dimensions	2465*1134*35mm [97.05*44.65*1.38inches]
Weight	35kg (77.2lbs.)
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	TALESUN(T01) Staubli(PV-KST4-EVO2A/XY,PV-KBT4-EVO2A/XY)

APPLICATION CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	30A
Safety Protection Class	Class II
Test Mechanical load*	Front side +5400Pa, Back side -2400Pa
Refer. Bifaciality Factor	φVoc: 98±5%, φIsc: 80±5%, φPmax: 80±5%
Fire Rating	Class C
[T98]max	70°C

*Refer to the installation manual for details

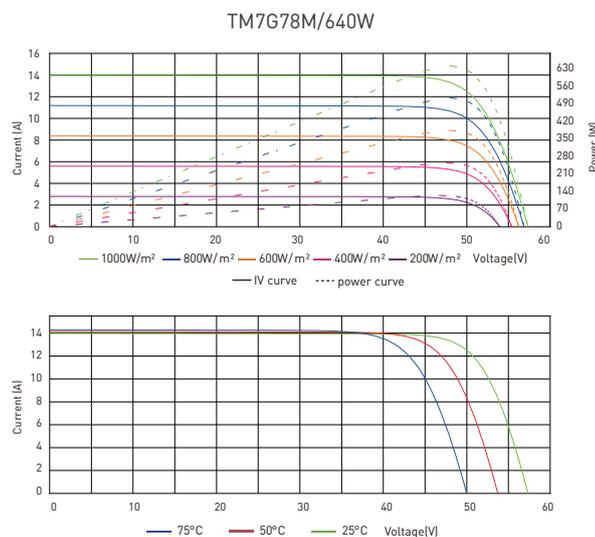
TEMPERATURE CHARACTERISTICS

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	31
Pieces Per Container(40'HQ)	496

Electrical Performance



TECHNICAL DRAWINGS

