



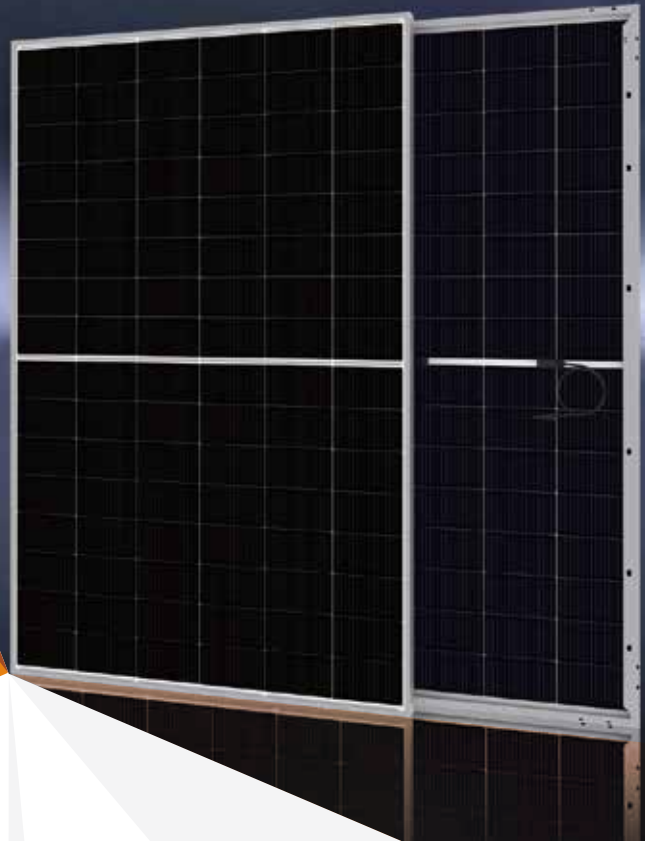
BIPRO

TM3G48M **96-c**

435 - 455W

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

Guaranteed Power

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)



Bifacial TOPCon cell technology

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



192 hours Anti-PID test



High wear-resistance

No water-permeability and high wear-resistance, can be widely used in high-humid, windy and dusty area



High waterproof level

www.talesun.com

marketing.hq@talesun.com

2024.04.10

ELECTRICAL CHARACTERISTICS

Parameter	435	330	440	334	445	338	450	342	455	346
Open-circuit voltage (V _{oc})	29.22	27.50	29.52	27.70	29.79	28.00	30.09	28.20	30.34	28.40
Short-circuit current (I _{sc})	14.89	12.00	14.91	12.05	14.94	12.09	14.96	12.12	15.00	12.17
Maximum power (P _{max})	34.98	33.20	35.20	33.40	35.42	33.60	35.64	33.80	35.85	34.00
Maximum power point voltage (V _{mp})	15.76	12.71	15.80	12.74	15.83	12.76	15.86	12.79	15.90	12.82
Temperature coefficient of P _{max} (%)	21.80	22.00	22.30	22.50	22.80					

Test conditions: 1000 W/m² irradiance, L1.5, T_{cell} = 25°C, AM1.5, A1.5, 0/+5% spectral mismatch, 3% reflection loss, 800 W/m² irradiance, L1.5, T_{cell} = 20°C, AM1.5, A1.5, 1% reflection loss.

REAR SIDE POWER GAIN(REFERENCE TO 445W FRONT)

Parameter	5%	10%	15%	20%	25%
Open-circuit voltage (V _{oc})	467	490	512	534	556
Short-circuit current (I _{sc})	29.79	29.79	29.79	29.79	29.79
Maximum power (P _{max})	15.69	16.43	17.18	17.93	18.68
Maximum power point voltage (V _{mp})	35.42	35.42	35.42	35.42	35.42
Maximum power point current (I _{mp})	16.62	17.41	18.20	19.00	19.79

MECHANICAL CHARACTERISTICS

Cell Type	N-type Mono-Crystallin (16Busbar)
Number of Cells	96pcs in series (6*16)
Dimensions (L*W*H)	1762*1134*30mm (69.37*44.65*1.18inches)
Weight	24.7kg (54.45lbs.)
Front Glass	2.0mm AR Coating Semi-tempered Glass
Back Glass	2.0mm Glazed Semi-tempered Glass
Frame	Anodized Aluminium Alloy
Protection	IP68, 3 Bypass Diodes
Wiring	4mm ² (IEC), 12AWG(UL) 350mm(+),250mm(-) or Customized Length
Mounting	T01/LJQ-3-CSY/MC4/MC4-EV02

APPLICATION CONDITIONS

Operating Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Operating Frequency	35A
Operating Class	Class II
Operating Pressure	Front side 5400Pa, Back side 2400Pa
Operating Humidity	80%±5%

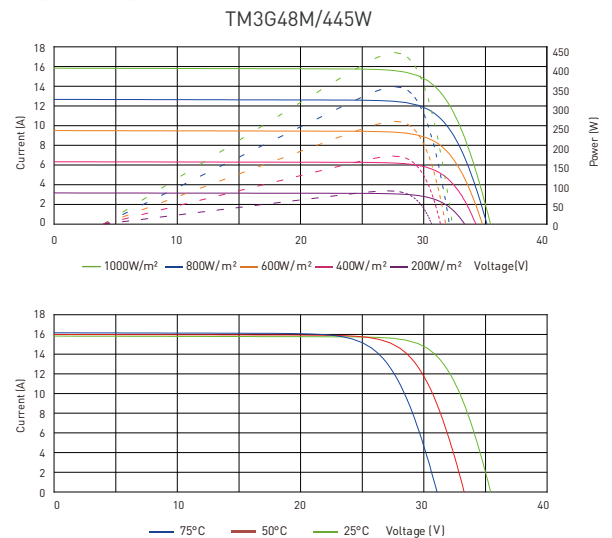
TEMPERATURE CHARACTERISTICS

Temperature Coefficient of V _{oc}	-0.29%/°C
Temperature Coefficient of I _{sc}	-0.24%/°C
Temperature Coefficient of P _{max}	+0.043%/°C
Temperature Coefficient of V _{mp}	43±2°C

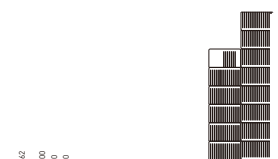
PACKING CONFIGURATION

Number of Panels per Tray	36	36(USA)
Number of Panels per Pallet (40 trays)	936	720

Electrical Performance



TECHNICAL DRAWINGS



1087
1134



The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Suzhou Talesun Solar Technologies Co., Ltd. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.