



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 N-type TOPCon

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



16BB Half-cut N-type TOPCon

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



192 hours Anti-PID test

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

High waterproof level

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ELECTRICAL CHARACTERISTICS

	435	330	440	334	445	338	450	342	455	346
V_{oc} (V)	29.22	27.50	29.52	27.70	29.79	28.00	30.09	28.20	30.34	28.40
V_{mp} (V)	14.89	12.00	14.91	12.05	14.94	12.09	14.96	12.12	15.00	12.17
V_{oc} (V)	34.98	33.20	35.20	33.40	35.42	33.60	35.64	33.80	35.85	34.00
V_{mp} (V)	15.76	12.71	15.80	12.74	15.83	12.76	15.86	12.79	15.90	12.82
η (%)	21.80		22.00		22.30		22.50		22.80	

1000 W/m², T_{cell} 25°C, V_{oc} 0, +5, V_{mp} 3%
 800 W/m², T_{cell} 20°C, V_{oc} 11%

REAR SIDE POWER GAIN(REFERENCE TO 445W FRONT)

	5%	10%	15%	20%	25%
V_{oc} (V)	467	490	512	534	556
V_{mp} (V)	29.79	29.79	29.79	29.79	29.79
V_{oc} (V)	15.69	16.43	17.18	17.93	18.68
V_{mp} (V)	35.42	35.42	35.42	35.42	35.42
V_{oc} (V)	16.62	17.41	18.20	19.00	19.79

MECHANICAL CHARACTERISTICS

Cell Type	N-type Mono-Crystallin (16Busbar)
Series	96pcs in series (6*16)
Dimensions (mm)	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

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

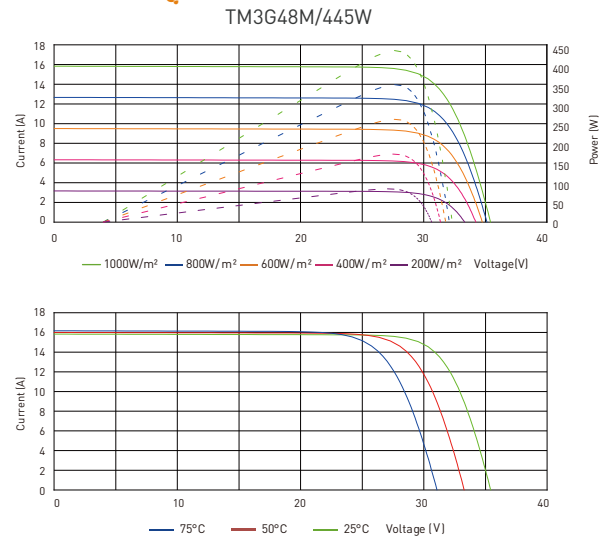
TEMPERATURE CHARACTERISTICS

V_{oc} Temperature Coefficient	-0.29%/°C
V_{mp} Temperature Coefficient	-0.24%/°C
I_{sc} Temperature Coefficient	+0.043%/°C
Temperature Tolerance	43±2°C

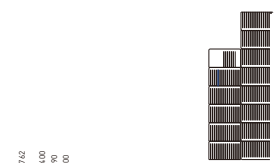
PACKING CONFIGURATION

Cells per Panel	36	36(USA)
Cells per Carton (40 Panels)	936	720

Electrical Characteristics



TECHNICAL DRAWINGS



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.