

BIPRO

TP6G72M 144 half-cell

385 - 410W

bifacial transparent single glass 9BB half-cut mono perc

KEY FEATURES



9BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss



Industry leading high yield

Bifacial PERC cell technology, 5%-25% more yield depends on different conditions



Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



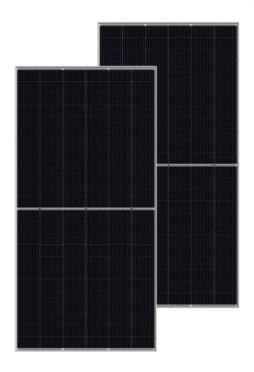
Wider application

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



IP68 junction box

High waterproof level



SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



















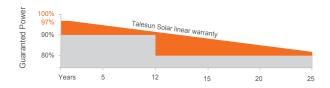


PERFORMANCE WARRANTY









ELECTRICAL PARAMETERS							
Performance at STC (Power Tolerance 0 ~	+3%)						
Maximum Power (Pmax/W)	385	390	395	400	405	410	
Operating Voltage (Vmpp/W)	40.5	40.8	41.1	41.4	41.7	42.0	
Operating Current (Impp/A)	9.51	9.56	9.61	9.67	9.72	9.77	
Open-Circuit Voltage (Voc/V)	48.5	48.7	48.9	49.1	49.3	49.5	
Short-Circuit Current (Isc/A)	10.02	10.08	10.14	10.20	10.26	10.32	
Module Efficiency ηm(%)	18.81	19.06	19.3	19.55	19.79	20.04	
Performance at NMOT							
Maximum Power (Pmax/W)	288	291.5	295.1	298.8	302.4	306.1	
Operating Voltage (Vmpp/W)	37.8	38.1	38.3	38.5	38.8	39.0	
Operating Current (Impp/A)	7.61	7.65	7.70	7.75	7.80	7.86	
Open-Circuit Voltage (Voc/V)	45.4	45.6	45.7	45.9	46.1	46.3	
Short-Circuit Current (Isc/A)	8.08	8.13	8.18	8.23	8.27	8.32	
STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5	NMOT: Irradiance at 800W/m², Ambient	Temperatue 2	0°C, Air Mass AM	1.5, Wind Speed	d 1m/s		

Electrical characteristics with different rear side power gain (refer to 400W front)

Pmax gain	Pmax/W	Vmpp/W	Impp/A	Voc/V	Isc/A
5%	420	41.4	10.14	49.1	10.71
10%	440	41.4	10.63	49.1	11.22
15%	460	41.4	11.11	49.1	11.73
20%	480	41.4	11.59	49.1	12.24
25%	500	41.4	12.08	49.1	12.75

MECHANICAL SPECIFICATION

Cell Type	Half-cell 9 busbar
Cell Dimensions	158.75*158.75mm (6inches)
Cell Arrangement	144 (6*24)
Weight	23.5kg (51.8lbs)
Module Dimensions	2030*1008*35mm (79.72*39.68*1.38inches)
Cable Length	(+)500mm (19.69inches) / (-)500mm (19.69inches)
Cable Cross Section Size	4mm² (0.006inches²)
Front Glass	3.2mm High Transmission, Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration(1)	31pcs/carton, 682pcs/40hq
Packing Configuration(2)	31+3pcs/carton, 715pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

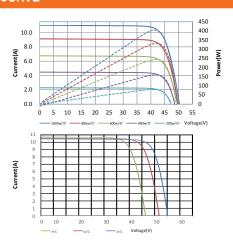
OPERATING CONDITIONS

Maximun System Voltage	1500V/DC
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	20A
Static Loading	5400pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible
Backside Output Ratio* *Under STC: Backside Output Ratio = P _{max(rear)} /P _{max(front)}	60% - 80%

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	42+2°C

I-V CURVE



TECHNICAL DRAWINGS

