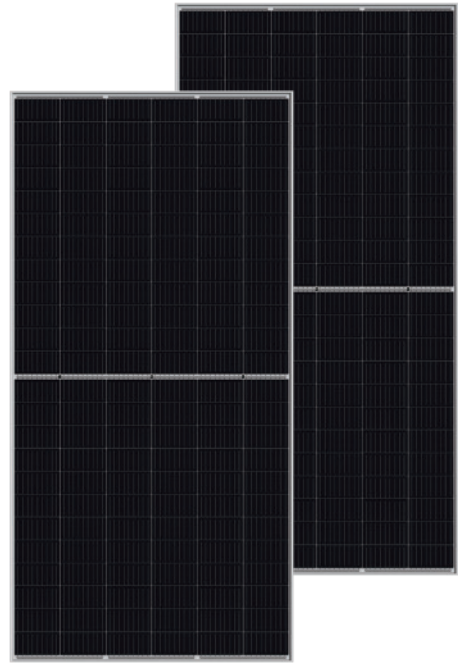


# BIPRO

TP6G72M  
TP6G72M(H) **144 half-cell**

**390 - 415W**

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

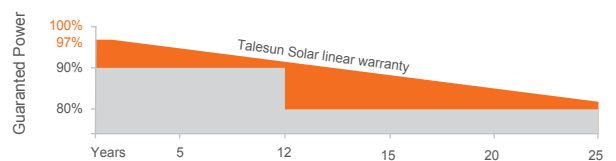


## PERFORMANCE WARRANTY

**12** years  
Quality assurance

**25** years  
Power output guarantee

■ Talesun standard  
■ Industry standard



## ELECTRICAL PARAMETERS

### Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	390	395	400	405	410	415
Operating Voltage (Vmpp/V)	40.8	41.1	41.4	41.7	42.0	42.3
Operating Current (Impp/A)	9.56	9.61	9.67	9.72	9.77	9.82
Open-Circuit Voltage (Voc/V)	48.7	48.9	49.1	49.3	49.5	49.7
Short-Circuit Current (Isc/A)	10.08	10.14	10.20	10.26	10.32	10.38
Module Efficiency $\eta$ (%)	19.06	19.3	19.55	19.79	20.04	20.28

### Performance at NMOT

Maximum Power (Pmax/W)	291.5	295.1	298.8	302.4	306.1	309.8
Operating Voltage (Vmpp/V)	38.1	38.3	38.5	38.8	39.0	39.2
Operating Current (Impp/A)	7.65	7.70	7.75	7.80	7.86	7.91
Open-Circuit Voltage (Voc/V)	45.6	45.7	45.9	46.1	46.3	46.4
Short-Circuit Current (Isc/A)	8.13	8.18	8.23	8.27	8.32	8.37

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

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

Pmax gain	Pmax/W	Vmpp/V	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 (Portrait)	(+)300mm (11.81inches) / (-)300mm (11.81inches)
Cable Length (Landscape)	(+)1200mm (47.24inches) / (-)1200mm (47.24inches)
Cable Cross Section Size	4mm <sup>2</sup> (0.006inches <sup>2</sup> )
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

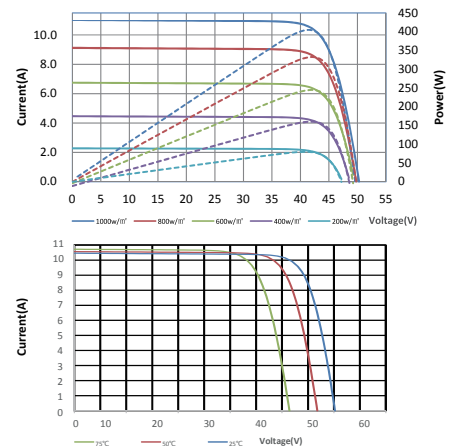
## OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	20A
Static Loading	5400pa
Conductivity at Ground	$\leq 0.1\Omega$
Safety Class	II
Resistance	$\geq 100M\Omega$
Connector	MC4 Compatible
Backside Output Ratio*	60% - 80%
*Under STC: Backside Output Ratio = $P_{\max(\text{rear})} / P_{\max(\text{front})}$	

## TEMPERATURE COEFFICIENT

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

## I-V CURVE



## TECHNICAL DRAWINGS

