

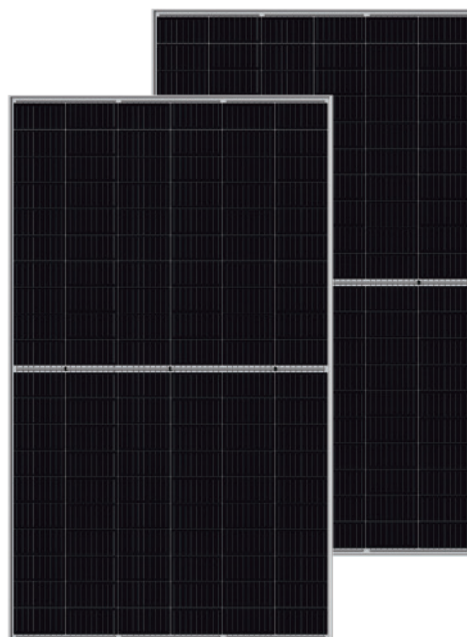
# BIPRO

TD6G60M **120-cell**

**320 - 340W**

bifacial dual 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

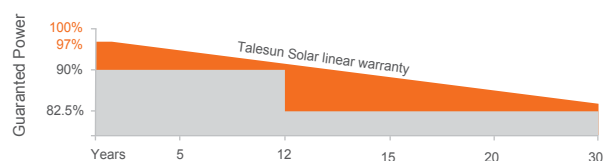
- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



## PERFORMANCE WARRANTY



■ Talesun standard  
■ Industry standard



## ELECTRICAL PARAMETERS

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

Maximum Power (Pmax/W)	320	325	330	335	340
Operating Voltage (Vmpp/W)	33.2	33.5	33.8	34.1	34.4
Operating Current (Impp/A)	9.64	9.71	9.77	9.83	9.89
Open-Circuit Voltage (Voc/V)	40.2	40.4	40.6	40.8	41.0
Short-Circuit Current (Isc/A)	10.20	10.25	10.30	10.35	10.40
Module Efficiency $\eta_m(\%)$	18.56	18.85	19.14	19.43	19.72

### Performance at NMOT

Maximum Power (Pmax/W)	302.2	307.1	311.8	316.6	321.3
Operating Voltage (Vmpp/W)	31.3	31.6	31.9	32.2	32.6
Operating Current (Impp/A)	9.65	9.71	9.77	9.82	9.86
Open-Circuit Voltage (Voc/V)	38.4	38.5	38.7	38.9	39.1
Short-Circuit Current (Isc/A)	10.27	10.32	10.37	10.42	10.47

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

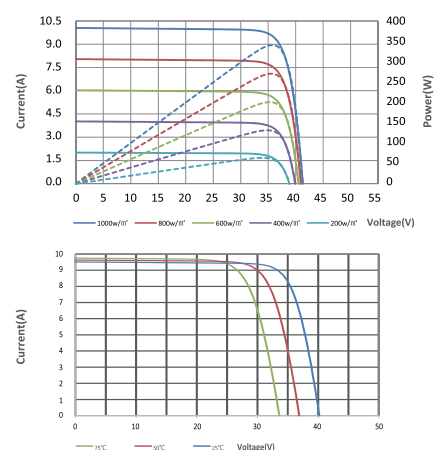
### Electrical characteristics with different rear side power gain (refer to 340W front)

Pmax gain	Pmax/W	Vmpp/W	Impp/A	Voc/V	Isc/A
5%	357	34.4	10.38	41	10.92
10%	374	34.4	10.88	41	11.44
15%	391	34.4	11.37	41	11.96
20%	411	34.6	11.87	41.2	12.48
25%	428	34.6	12.36	41.2	13.00

## MECHANICAL SPECIFICATION

Cell Type	Half-cell 9 busbar
Cell Dimensions	158.75*158.75mm (6inches)
Cell Arrangement	120 (6*20)
Weight	23kg
Module Dimensions	1705*1011*30mm (67.13*39.8*1.18inches)
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	2.0mm (0.08inches) AR Coated Strengthened Glass
Black Glass	2.0mm (0.08inches) Heat Strengthened Glass (White Grid Glass)
No. of Bypass Diodes	3/6
Packing Configuration	32pcs/carton, 832pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

## I-V CURVE



## OPERATING CONDITIONS

Maximum System Voltage	1500V/DC
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	20A
Static Loading	5400pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible
Backside Output Ratio*	>75%
*Under STC: Backside Output Ratio = $P_{\max(\text{rear})} / P_{\max(\text{front})}$	

## TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.35%/°C
Temperature Coefficient Voc	-0.25%/°C
Temperature Coefficient Isc	+0.04%/°C
NMOT	41±3°C

## TECHNICAL DRAWINGS

