

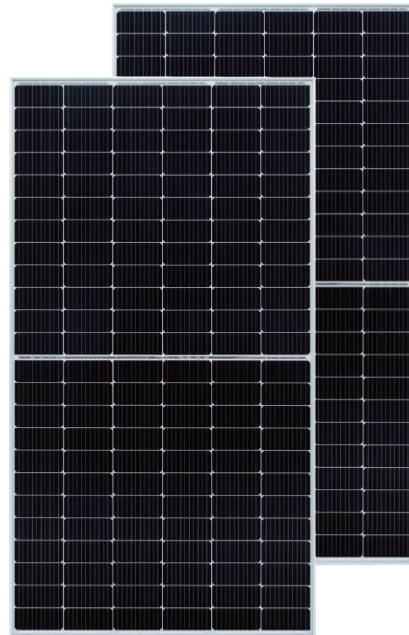
BIPRO

TD7G72M **144 half-cell**

525 - 550W

bifacial dual glass

10BB half-cut mono perc



KEY FEATURES



10BB 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

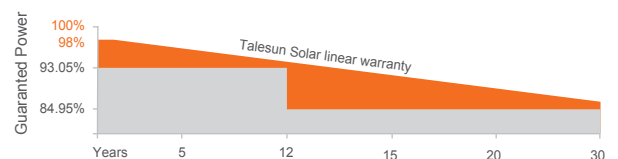


PERFORMANCE WARRANTY

12 years
Quality assurance

30 years
Power output guarantee

■ Talesun standard
■ Industry standard



ELECTRICAL PARAMETERS

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

Maximum Power (Pmax/W)	525	530	535	540	545	550
Operating Voltage (Vmpp/V)	40.6	40.8	41.0	41.2	41.4	41.6
Operating Current (Impp/A)	12.94	13.00	13.05	13.11	13.17	13.23
Open-Circuit Voltage (Voc/V)	48.8	49.0	49.2	49.4	49.6	49.8
Short-Circuit Current (Isc/A)	13.71	13.76	13.81	13.87	13.93	13.99
Module Efficiency ηm(%)	20.1	20.3	20.5	20.7	20.9	21.1

Performance at NMOT

Maximum Power (Pmax/W)	391.6	395.4	398.9	402.8	406.6	410.5
Operating Voltage (Vmpp/V)	37.8	38.0	38.2	38.4	38.6	38.8
Operating Current (Impp/A)	10.35	10.40	10.44	10.49	10.54	10.59
Open-Circuit Voltage (Voc/V)	45.7	45.9	46.1	46.3	46.4	46.6
Short-Circuit Current (Isc/A)	11.05	11.09	11.13	11.18	11.23	11.28

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

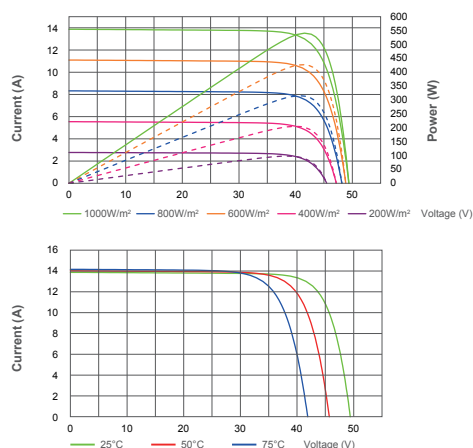
Electrical characteristics with different rear side power gain (refer to 540W front)

Pmax gain	Pmax/W	Vmpp/V	Impp/A	Voc/V	Isc/A
5%	567	41.2	13.77	49.4	14.56
10%	594	41.2	14.42	49.4	15.26
15%	621	41.2	15.08	49.4	15.95
20%	648	41.2	15.73	49.4	16.64
25%	675	41.2	16.39	49.4	17.34

MECHANICAL SPECIFICATION

Cell Type	Mono-Crystalline Silicon (10Busbar)
Cell Dimensions	182*182mm (7inches)
Cell Arrangement	144 (6*24)
Weight	32kg (70.5lbs.)
Module Dimensions	2300*1135*35mm (90.55*44.68*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 ² (0.006inches ²)
Front Glass	2.0mm (0.08inches) AR Coated Strengthened Glass
Back Glass	2.0mm (0.08inches) Heat Strengthened Glass (White Grid Glass)
No. of Bypass Diodes	3/6
Packing Configuration	31pcs/carton, 620pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

I-V CURVE



OPERATING CONDITIONS

Maximum System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	25A
Static Loading	5400pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible
Backside Output Ratio*	70% ± 5%
*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	43±2°C

TECHNICAL DRAWINGS

