

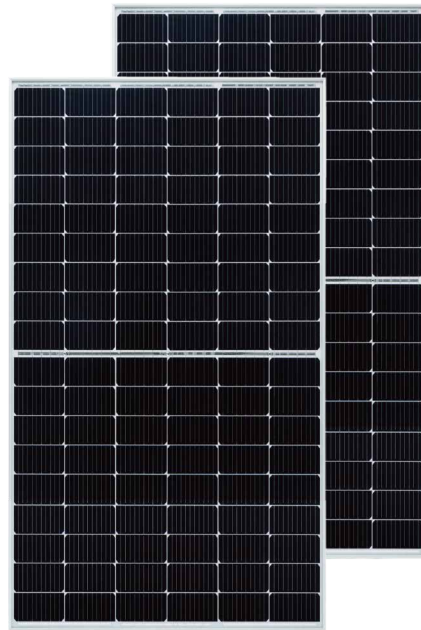
BIPRO

TD7G54M **108 half-cell**

395 - 415W

bifacial dual glass

10BB half-cut mono perc



KEY FEATURES



10BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss
Ga doped wafer, attenuation < 2% (1st year) / ≤ 0.45% (Linear)



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

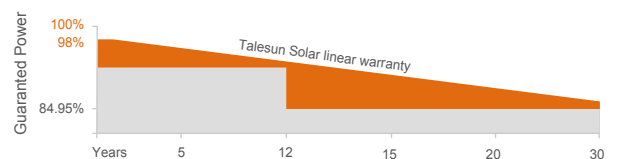
- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



PERFORMANCE WARRANTY



- Linear Performance Warranty
- Standard Performance Warranty



ELECTRICAL PARAMETERS

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

Maximum Power (Pmax/W)	395	400	405	410	415
Operating Voltage (Vmpp/V)	30.85	31.05	31.24	31.43	31.64
Operating Current (Impp/A)	12.81	12.89	12.97	13.05	13.13
Open-Circuit Voltage (Voc/V)	36.75	37.00	37.25	37.50	37.75
Short-Circuit Current (Isc/A)	13.69	13.78	13.86	13.94	14.02
Module Efficiency ηm(%)	20.2	20.5	20.7	21.0	21.3

Performance at NMOT

Maximum Power (Pmax/W)	294	298	302	306	310
Operating Voltage (Vmpp/V)	28.8	29.0	29.2	29.3	29.6
Operating Current (Impp/A)	10.23	10.30	10.36	10.42	10.48
Open-Circuit Voltage (Voc/V)	34.6	34.8	35.1	35.3	35.5
Short-Circuit Current (Isc/A)	11.04	11.11	11.17	11.24	11.30

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

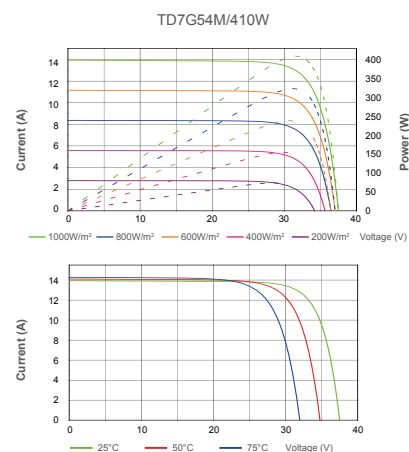
Electrical characteristics with different rear side power gain (refer to 410W front)

Pmax gain	Pmax/W	Vmpp/V	Impp/A	Voc/V	Isc/A
5%	431	31.43	13.70	37.50	14.65
10%	451	31.43	14.36	37.50	15.35
15%	472	31.43	15.01	37.50	16.04
20%	492	31.43	15.66	37.50	16.74
25%	513	31.43	16.31	37.50	17.44

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	108 (6*18)
Weight	26kg ((57.32lbs.))
Module Dimensions	1728*1134*30mm (68.03*44.65*1.18inches)
Cable Length	Portrait 300mm(11.81 inches) or Customized Length
Cable Cross Section Size	TUV: 4mm ² (0.006inches ²)/UL: 12AWG
Front Glass	2.0mm (0.08 inches) AR Coating Semi-tempered Glass
Back Glass	2.0mm (0.08 inches) Glazed Semi-tempered Glass
No. of Bypass Diodes	3
Packing Configuration (1)	36pcs/carton, 936pcs/40hq
Packing Configuration (for USA)	36pcs/carton, 648pcs/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	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2
Backside Output Ratio*	70% ± 5%
*Under STC: Backside Output Ratio = P _{max(rear)} / P _{max(front)}	

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.35%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.048%/°C
NMOT	43±2°C

TECHNICAL DRAWINGS

