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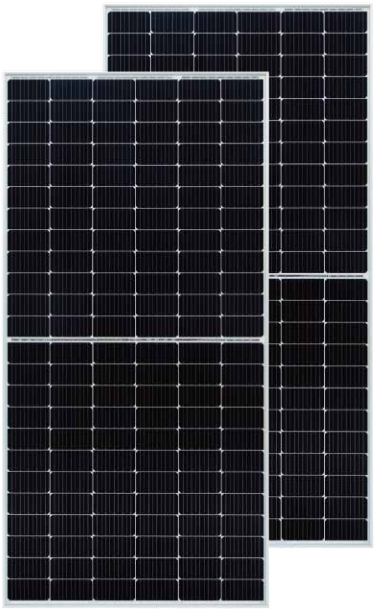
BIPRO

TD6I72M **144-cell**

430 - 450W

bifacial dual glass
9BB half-cut mono perc



KEY FEATURES

9BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss
Ga dopped 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

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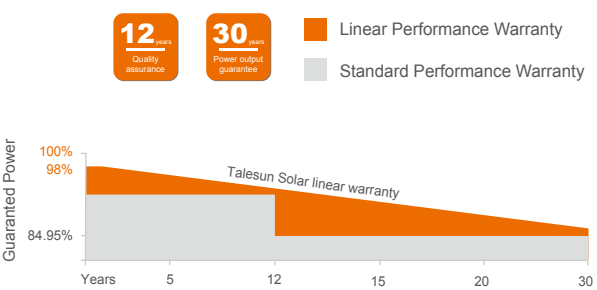
PERFORMANCE WARRANTY



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Annual Module Capacity Globally: 10GW
China: 8GW
Thailand: 2GW

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ELECTRICAL PARAMETERS

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

Maximum Power (Pmax/W)	430	435	440	445	450
Operating Voltage (Vmpp/V)	41.2	41.4	41.6	41.8	42.0
Operating Current (Impp/A)	10.44	10.51	10.58	10.65	10.72
Open-Circuit Voltage (Voc/V)	49.6	49.8	50.0	50.2	50.4
Short-Circuit Current (Isc/A)	11.09	11.16	11.22	11.29	11.36
Module Efficiency ηm(%)	19.8	20.0	20.2	20.5	20.7

Performance at NMOT

Maximum Power (Pmax/W)	319	323	327	330	334
Operating Voltage (Vmpp/V)	38.5	38.7	38.9	39.1	39.3
Operating Current (Impp/A)	8.30	8.36	8.41	8.47	8.52
Open-Circuit Voltage (Voc/V)	46.4	46.6	46.8	46.9	47.1
Short-Circuit Current (Isc/A)	8.94	9.00	9.04	9.10	9.16

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

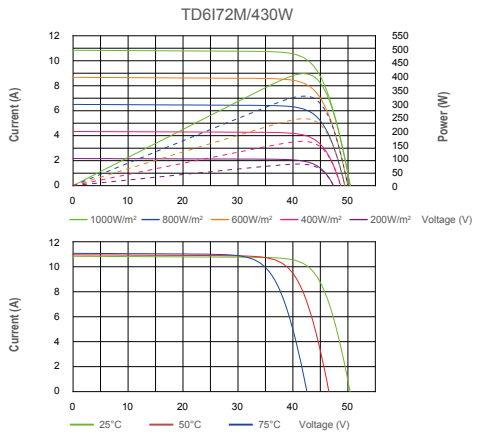
Electrical characteristics with different rear side power gain (refer to 440W front)

Pmax gain	Pmax/W	Vmpp/V	Impp/A	Voc/V	Isc/A
5%	462	41.6	11.11	50.0	11.78
10%	484	41.6	11.64	50.0	12.34
15%	506	41.6	12.17	50.0	12.90
20%	528	41.6	12.70	50.2	13.46
25%	550	41.6	13.23	50.2	14.03

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	166*166mm
Cell Arrangement	144 (6*24)
Weight	28kg (61.73lbs)
Module Dimensions	2094*1038*30mm (82.44*40.87*1.18inches)
Cable Length (Portrait)	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm² (0.006inches²)/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	3/6
Packing Configuration (1)	35pcs/carton, 770pcs/40hq
Packing Configuration (for USA)	35pcs/carton, 630pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

I-V CURVE



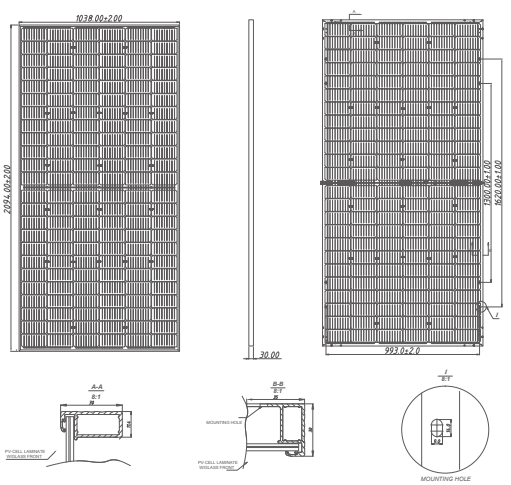
OPERATING CONDITIONS

Maximun System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximun 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* *Under STC: Backside Output Ratio = $P_{max(rear)}$ /$P_{max(front)}$	70% ± 5%

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



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