



BIPRO

TD6I72M **144-cell**

435 - 455W

Bifacial Dual Glass
9BB Half-cut Mono Perc



SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61703
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



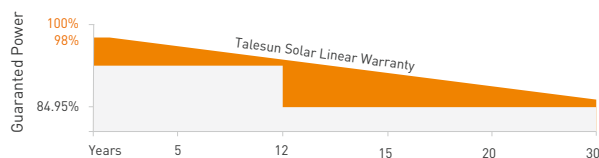
PERFORMANCE WARRANTY

12 Years
Quality Assurance

30 Years
Power Output Guarantee

Linear Performance Warranty

Standard Performance Warranty



KEY FEATURES



9BB Half-cut Cell Technology

New circuit design, lower internal current, lower R_s loss
Ga doped wafer, attenuation $<2\%$ (1st year) / $\leq 0.45\%$ (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



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

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* GL-EN-Version 2022.03.01

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	435	323	440	327	445	330	450	334	455	338
Operating Voltage (Vmpp/V)	41.4	38.7	41.6	38.9	41.8	39.1	42.0	39.3	42.2	39.4
Operating Current (Impp/A)	10.51	8.36	10.58	8.41	10.65	8.47	10.72	8.52	10.79	8.57
Open-Circuit Voltage (Voc/V)	49.8	46.6	50.0	46.8	50.2	46.9	50.4	47.1	50.6	47.3
Short-Circuit Current (Isc/A)	11.16	9.00	11.22	9.04	11.29	9.10	11.36	9.16	11.43	9.21
Module Efficiency [%]	20.00		20.20		20.50		20.70		20.90	

STC: Irradiance 1000W/m², Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3%
 NMOT: Irradiance 800W/m², Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

REAR SIDE POWER GAIN(REFERENCE TO 440W FRONT)

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

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline 166*166mm
No. of Cells	144 [6*24]
Module Dimensions	2094*1038*30mm [82.44*40.87*1.18inches]
Weight	28.0kg [61.73lbs]
Front Glass	2.0mm AR Coating Semi-tempered Glass
Back Glass	2.0mm Glazed Semi-tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Output Cables	4mm ² (IEC), 12AWG(UL) 300mm in Length or Customized Length
Connectors	T01/LJQ-3-CSY/MC4/MC4-EV02

APPLICATION CONDITIONS

Maximun System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximun Series Fuse	25A
Safety Protection Class	Class II
Mechanical Load	Front side 5400Pa, Back side 2400Pa
Refer. Bifaciality Factor	70%±5%

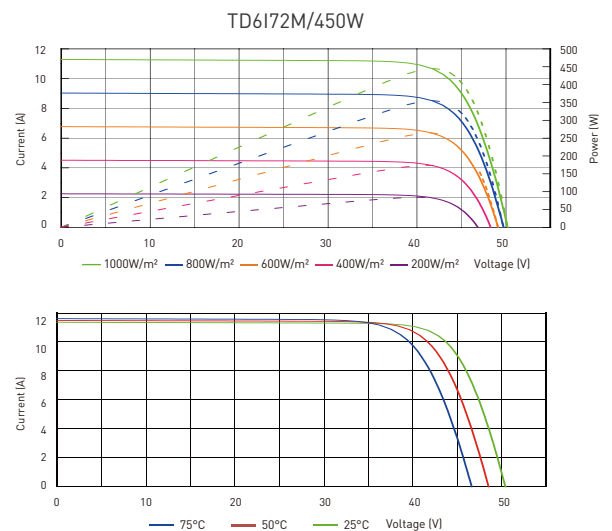
TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	-0.36%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	+0.043%/°C
Nominal Module Operating Temperature(NMOT)	43±2°C

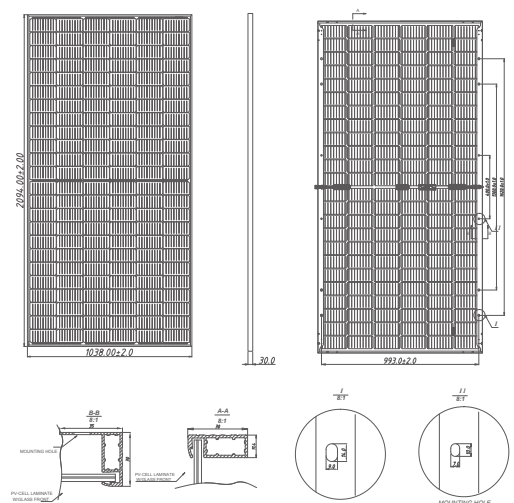
PACKING CONFIGURATION

Pieces Per Pallet	36	36(USA)
Pieces Per Container(40'HQ)	792	648

I-V CURVE



TECHNICAL DRAWINGS



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