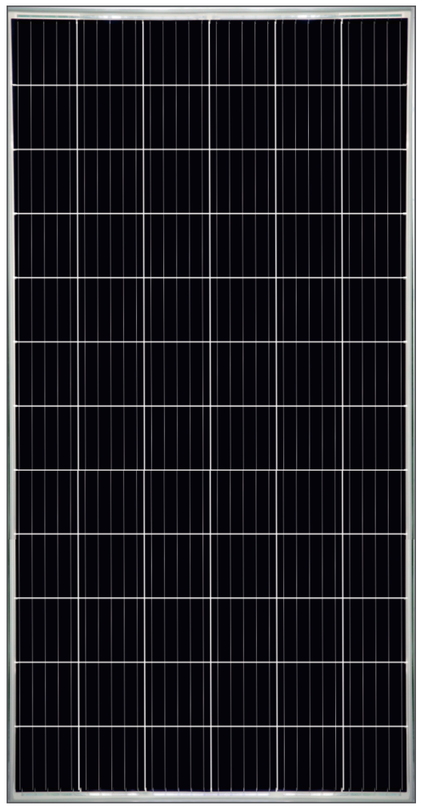
BLACK SILICON

POLYCRSTALLINE SOLAR MODULE TW325PWH-72



Advantages

Higher module power

Special surface treatment of black silicon solar cell effectively eliminates reflection of the solar cell, and increases utilization rate of incident light, achieving high efficiency of both solar cell and module, and low module costs.

1,500V high-voltage system

Be capable for connecting more modules in series, and reduce number of power station cables and combiner boxes; increase space utilization and cut system cost.

Strict quality control

Advanced full-automatic production line, 100% EL during process and ex-factory; strict quality inspection control, 0~+5% positive power output; optimized current grading; all these ensure generating performance matching of system-end modules and high generation output of modules

Longer service life

Weather-resistant package material, anti-PID solar cell, water-proof IP67 junction box and special cables for solar PV; all these functions protect modules against temperature difference between day and night, seasonal change and abnormal wet and cold weather, and provide longer service life.

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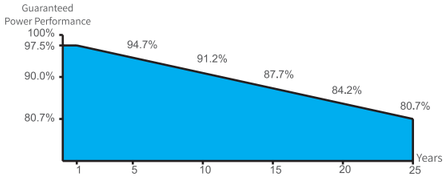
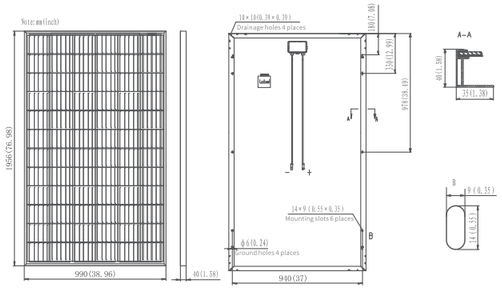
Linear Power Warranty of TW Polycrystalline Solar Module
10 years Product Workmanship Warranty 25 years Linear Power Warranty





MECHANICAL CHARACTERISTICS

Dimensions	1956×990×40mm (L×W×H)
Weight	27.5kg
Front Glass	White toughened safety glass, 4mm
Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Cells	72pcs 156.75×156.75mm Polycrystalline solar 5BB black silicon solar cells
Backsheet	Composite film
Frame	Anodized aluminum profile
Junction Box	Rated current:13A, IP67, TUV&UL
Cable	Length 1000mm, 1×4mm²
Connector	Compatible with MC4

TEMPERATURE CHARACTERISTICS

NOCT	45℃(±2℃)
Temperature Coefficient of Voc	-0.31%/℃
Temperature Coefficient of Isc	0.043%/℃
Temperature Coefficient of Pm	-0.40%/℃

MAXIMUM RATINGS

Maximum System Voltage [V]	DC 1000(IEC) DC1000(UL)
Series Fuse Rating [A]	20
Maximum Surface Load Capacity [Pa]	5,400
Temperature Range [°C]	– 40 to + 85
Withstanding Hail	Maximum diameter of 45 mm with impact speed of 30.7 m·s⁻¹

ELECTRICAL CHARACTERISTICS AT STANDARD TEST CONDITIONS(STC)

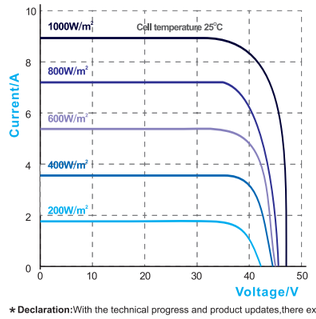
Module Type: TW 325 PWH-72	345	340	335	330	325	320	315	310
Maximum Power-Pm [W]	345	340	335	330	325	320	315	310
Open Circuit Voltage-Voc [V]	46.5	46.4	46.2	46.0	45.8	45.6	45.4	45.2
Short Circuit Current-Isc [A]	9.44	9.37	9.30	9.22	9.15	9.07	9.00	8.93
Maximum Power Voltage-Vm [V]	38.3	38.1	37.9	37.7	37.5	37.3	37.1	36.9
Maximum Power Current-Im [A]	9.01	8.92	8.84	8.75	8.67	8.58	8.49	8.40
Module Efficiency-η [%]	17.8	17.5	17.3	17.0	16.7	16.5	16.2	16.0

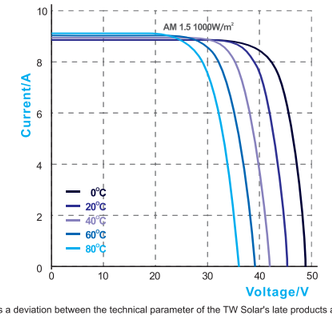
ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power-Pm [W]	254	250	247	243	239	236	232	228
Open Circuit Voltage-Voc [V]	42.4	42.3	42.1	42	41.8	41.6	41.4	41.2
Short Circuit Current-Isc [A]	7.62	7.56	7.50	7.44	7.38	7.32	7.26	7.21
Maximum Power Voltage-Vm [V]	34.9	34.8	34.6	34.4	34.2	34.0	33.8	33.7
Maximum Power Current-Im [A]	7.27	7.20	7.13	7.06	7.00	6.92	6.85	6.78

Note: 1. Standard Test Conditions [STC]: irradiance 1000 W/m²; AM 1.5; ambient temperature 25℃ according to EN 60904-3;
2. Normal Operating Cell Temperature (NOCT): Irradiance 800W/ m²; wind speed 1m/s ,cell temperature 45℃; ambient temperature 20℃.
3. Tolerance of Pm: 0~+5%, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±5%.

IV CURVE





OTHER CHARACTERISTICS

Packaging	26 pcs/box; 624 pcs/40′ container; 832 pcs/flat car
Warranty	10 year Product Workmanship Warranty 25 year Linear Power Warranty

★**Declaration:**With the technical progress and product updates,there exists a deviation between the technical parameter of the TW Solar's late products and the technical parameter in this specification,The TW Solar reserves the right to adjust the technical parameter at any time without notifying the customers, TW Solar has the ultimate power of interpretation to this technical specification.