THE

DUOMAX

HALF-CELL DUAL GLASS 120 LAYOUT MODULE



MULTICRYSTALLINE MODULE

285-300W **POWER OUTPUT RANGE**

17.6%

MAXIMUM EFFICIENCY

0~+5W **POSITIVE POWER TOLERANCE**

Founded in 1997, Trina Solar is the world's leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates

IEC61215/UL1703/IEC61730/IEC61701/IEC62716 ISO 9001: Quality Management System ISO 14001: Environmental Management System ISO14064: Greenhouse Gases Emissions Verification OHSAS 18001: Occupation Health and Safety Management System











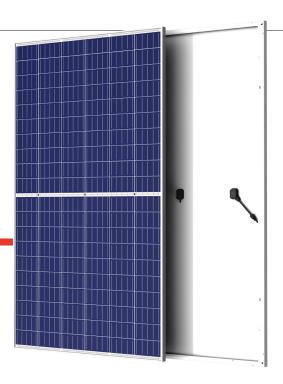








POWER RANGE 285-300W





High power

- Up to 300W front power and 17.6% module efficiency with half-cut technology bringing more BOS savings
- Lower resistance of half-cut ensure high power



High reliability

- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Proven to be reliable in high temperature and humidity areas
- Certificated to fire class A
- Minimizes micro-crack and snail trails
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative



High energy generation

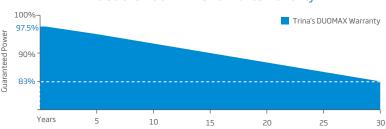
- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Lower NMOT bring more energy leading to lower LCOE
- Better anti-shading performance and lower operating temperature



Easy to install

- Frame design makes module compatible with all racking and installation methods
- Easy to handle and install as normal framed module during transportation

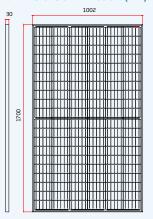
Trina Solar's DUOMAX Performance Warranty



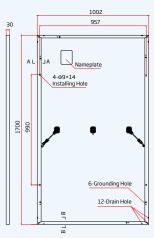
From the 2nd year to the 30th year, the average annual power decline will be no more than 0.5%.

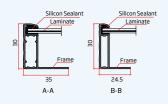


DIMENSIONS OF PV MODULE(mm)

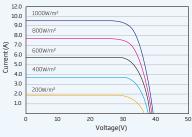


Front View

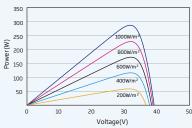




I-V CURVES OF PV MODULE(290W)



P-V CURVES OF PV MODULE(290W)



ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)*	285	290	295	300
Power Output Tolerance-PMAX (W)	0~+5			
Maximum Power Voltage-VMPP (V)	31.5	31.8	32.1	32.3
Maximum Power Current-IMPP (A)	9.05	9.12	9.19	9.29
Open Circuit Voltage-Voc (V)	38.8	39.2	39.5	39.8
Short Circuit Current-Isc (A)	9.53	9.60	9.67	9.77
Module Efficiency η m (%)	16.7	17.0	17.3	17.6

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: $\pm 3\%$.

ELECTRICAL DATA (NMOT)

Maximum Power-P _{MAX} (Wp)	216	219	223	227
Maximum Power Voltage-V _{MPP} (V)	29.8	30.1	30.4	30.6
Maximum Power Current-IMPP (A)	7.24	7.29	7.35	7.42
Open Circuit Voltage-Voc (V)	36.5	36.9	37.2	37.4
Short Circuit Current-Isc (A)	7.69	7.74	7.80	7.88

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Multicrystalline
Cell Orientation	120 cells (6 × 20)
Module Dimensions	1700 × 1002 × 30 mm (66.93× 39.45 × 1.18 inches)
Weight	22.0 kg (48.5 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass
Frame	30 mm(1.18 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: N 140mm/P 285mm((5.51/11.22inches) Landscape: N 1200 mm /P 1200 mm (47.24/47.24 inches)
Connector	MC4 / TS4*

^{*}Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NMOT (Nominal Module OperatingTemperature)	41°C (±3°C)
Temperature Coefficient of PMAX	- 0.38%/°C
Temperature Coefficient of Voc	- 0.31%/°C
Temperature Coefficient of Isc	0.05%/°C

MAXIMUM RATINGS

	Operational Temperature	-40~+85°C		
	Maximum System Voltage	1500V DC (IEC)		
		1500V DC (UL)		
	Max Series Fuse Rating	20A		

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

WARRANTY

12 year Product Workmanship Warranty 30 year Power Warranty

PACKAGING CONFIGURATION

Modules per box: 35 pieces Modules per 40' container: 910 pieces

(Please refer to product warranty for details)

