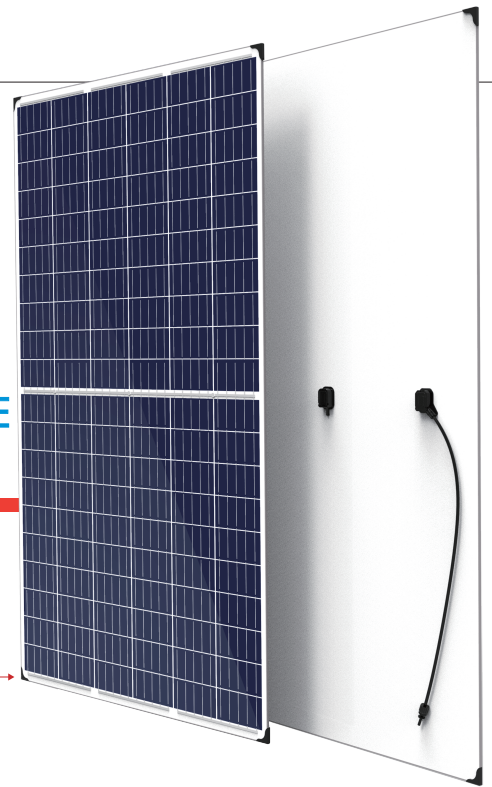


THE DUOMAX

HALF-CELL DUAL GLASS 60 LAYOUT MODULE



60 LAYOUT
MULTICRYSTALLINE MODULE

270-290W
POWER OUTPUT RANGE

17.4%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy. we believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

Comprehensive Products And System Certificates

IEC61215/IEC61730/UL1703/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



PRODUCTS	POWER RANGE
TSM-PEG5H	270-290W
TSM-PEG5H.07	270-285W



Increased value

- Reduce BOS cost with higher power bin and 1500V system voltage
- 30 year linear warranty
- 0.5% annual degradation
- Low thermal coefficients for greater energy production at higher temperature



Half-cell design brings higher efficiency

- New cell string layout and split J-box location to reduce the energy loss caused by shading between modules
- LRF(Light Redirecting Film) integrated to gain more power, need avoid light sensitive case
- Lower cell connection power losses due to half-cell layout(120 multicrystalline)



Highly reliable due to stringent quality control

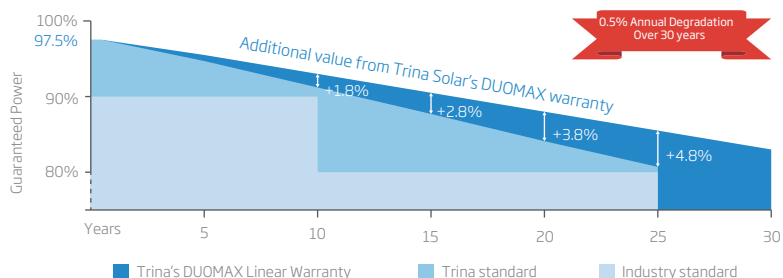
- Over 30 in-house tests (UV, TC, HF etc)
- Increased module robustness to minimize micro-cracks
- PID resistant and free of snail trails
- 100% EL double inspection



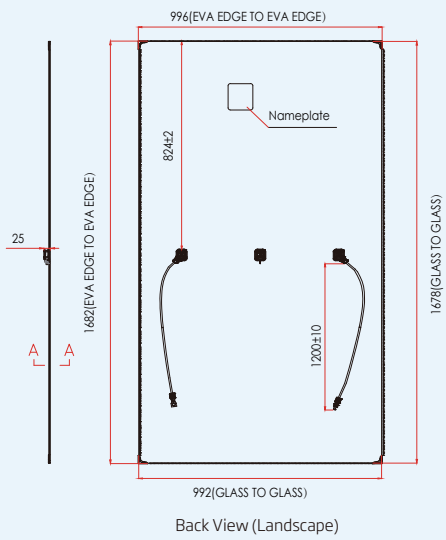
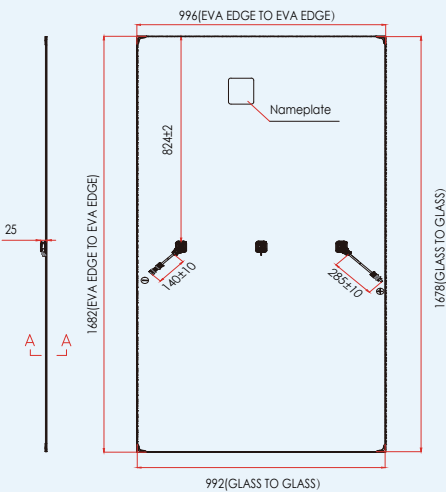
Certified to withstand the most challenging environmental conditions

- 2400 Pa negative load
- 5400 Pa positive load

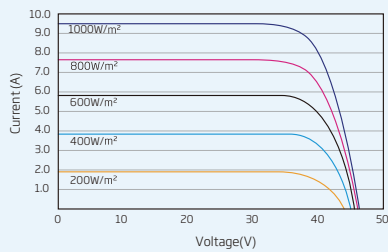
Trina Solar's DUOMAX Linear Performance Warranty



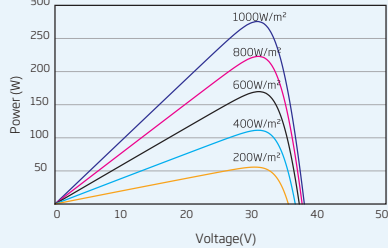
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(280W)



P-V CURVES OF PV MODULE(280W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	270	275	280	285	290
Power Output Tolerance- P_{MAX} (W)	0 ~ +5				
Maximum Power Voltage- V_{MPP} (V)	31.0	31.1	31.3	31.4	31.7
Maximum Power Current- I_{MPP} (A)	8.71	8.85	8.95	9.08	9.16
Open Circuit Voltage- V_{OC} (V)	38.2	38.5	38.7	38.8	39.0
Short Circuit Current- I_{SC} (A)	9.28	9.35	9.40	9.45	9.57
Module Efficiency η_m (%)	16.2	16.5	16.8	17.1	17.4

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

ELECTRICAL DATA (NOCT)

Maximum Power- P_{MAX} (Wp)	202	206	209	213	217
Maximum Power Voltage- V_{MPP} (V)	28.7	29.0	29.3	29.6	29.7
Maximum Power Current- I_{MPP} (A)	7.02	7.08	7.13	7.20	7.29
Open Circuit Voltage- V_{OC} (V)	35.6	35.9	36.1	36.1	36.3
Short Circuit Current- I_{SC} (A)	7.49	7.55	7.59	7.63	7.73

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

MECHANICAL DATA

Solar Cells	Multicrystalline 156.75 × 78.375 mm (6.17 × 3.09 inches)
Cell Orientation	120 cells (6 × 20)
Module Dimensions	1678 × 992 × 6 mm (66.06 × 39.06 × 0.24 inches) 1682 × 996 × 6 mm with edgebanding (66.22 × 39.21 × 0.24 inches) 1684 × 998 × 7.6 mm with corner (66.30 × 39.29 × 0.30 inches)
Weight	24 kg (52.9 lb)
Front Glass	2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA(White/Transparent)
Back Glass	2.5 mm (0.10 inches), Heat Strengthened Glass
Frame	Frameless
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), Portrait: N 140mm/P 285mm((5.51/11.22inches) Landscape: N 1200 mm /P 1200 mm (47.24/47.24 inches)
Connector	TS4/MC4-EV02

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	44°C (±2°C)
Temperature Coefficient of P_{MAX}	- 0.38%/°C
Temperature Coefficient of V_{OC}	- 0.31%/°C
Temperature Coefficient of I_{SC}	0.05%/°C

(DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection)

WARRANTY

10 year Product Workmanship Warranty
30 year Linear Power Warranty

(Please refer to product warranty for details)

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1000V DC (UL)
Max Series Fuse Rating	20A

PACKAGING CONFIGURATION

Modules per box: 33 pieces
Modules per 40' container: 858 pieces

