



MONOCRYSTALLINE MODULE

POWER RANGE: 570-595W

595W

MAXIMUM POWER OUTPUT

0~+5W

BINNING TOLERANCE

23.0%

MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation;
- Designed for compatibility with existing mainstream system components
- Higher return on Investment



High power up to 595W

- Up to 23.0% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



High reliability

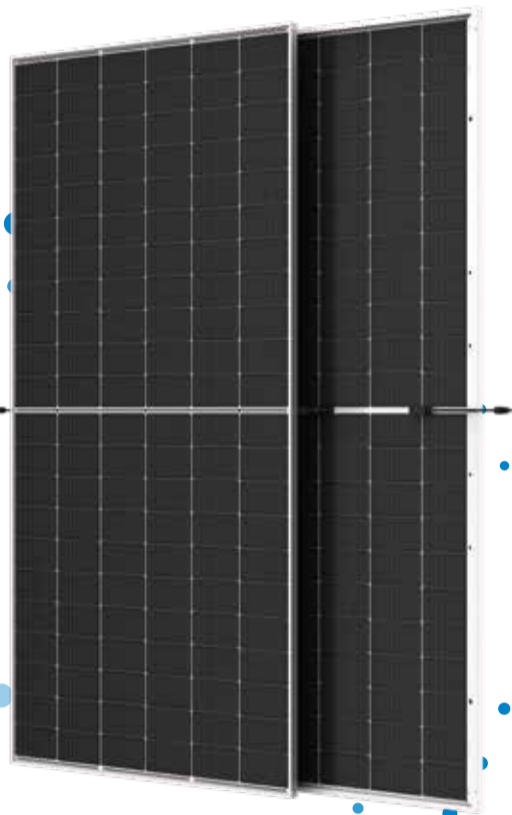
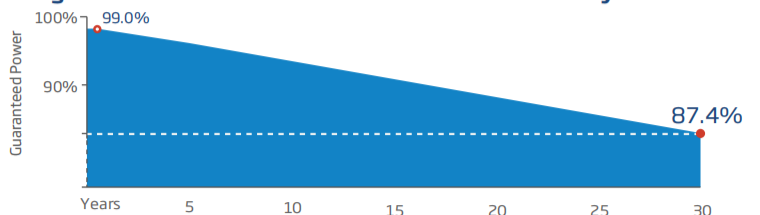
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control and fire class rating C
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.30%) and operating temperature
- Up to 30% additional power gain from back side depending on albedo

Lingtech Bifacial Dual Glass Performance Warranty

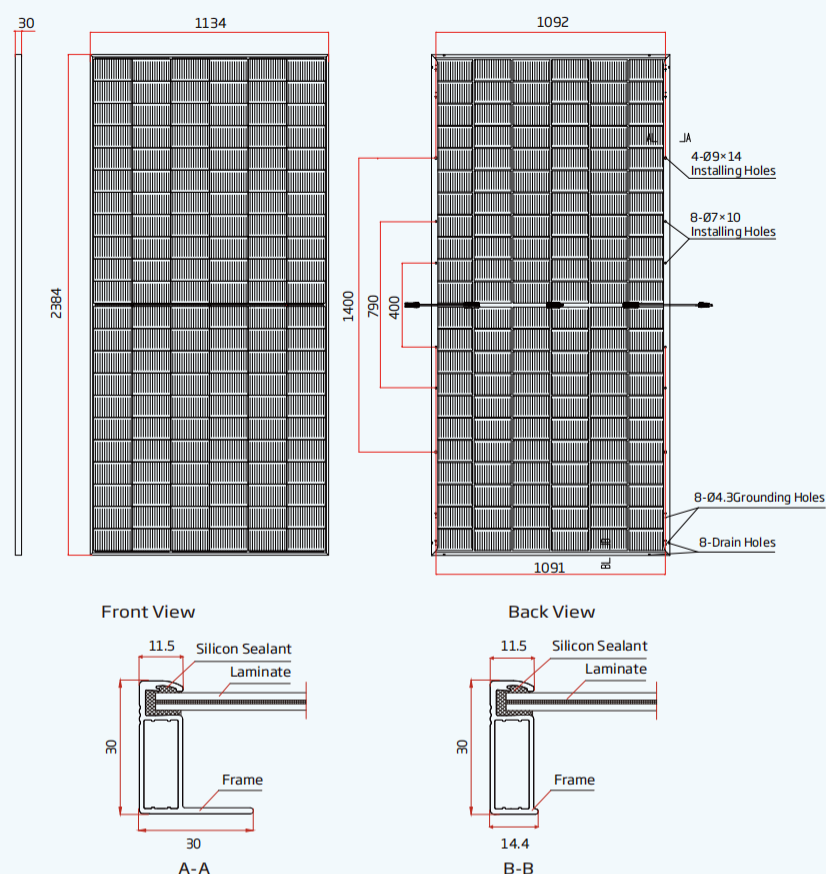


Comprehensive Products and System Certificates

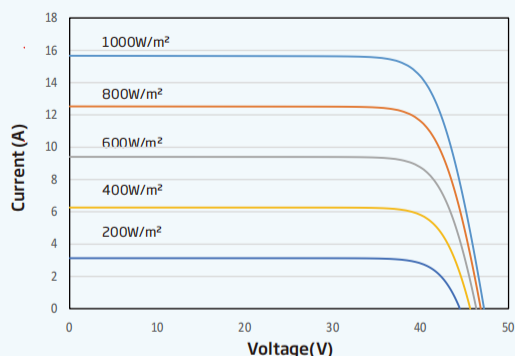


IEC61215/IEC61730/IEC61701/IEC62716/UL61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
ISO45001: Occupational Health and Safety Management System

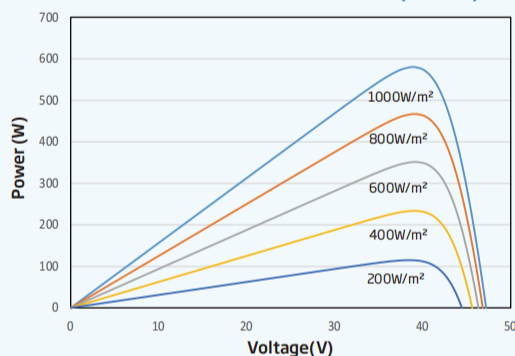
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(590 W)



P-V CURVES OF PV MODULE(590 W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	570	575	580	585	590	595
Binning Tolerance- P_{MAX} (W)	0 ~ +5					
Maximum Power Voltage- V_{MPP} (V)	38.6	38.9	39.2	39.5	39.7	40.0
Maximum Power Current- I_{MPP} (A)	14.75	14.78	14.79	14.82	14.86	14.89
Open Circuit Voltage- V_{OC} (V)	46.6	46.9	47.2	47.5	47.8	48.1
Short Circuit Current- I_{SC} (A)	15.61	15.63	15.65	15.68	15.72	15.76
Module Efficiency η_m (%)	21.1	21.3	21.5	21.6	21.8	22.0

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

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)

Total Equivalent power - P_{MAX} (Wp)	616	621	626	632	637	643
Maximum Power Voltage- V_{MPP} (V)	38.6	38.9	39.2	39.5	39.7	40.0
Maximum Power Current- I_{MPP} (A)	15.93	15.96	15.97	16.01	16.05	16.08
Open Circuit Voltage- V_{OC} (V)	46.6	46.9	47.2	47.5	47.8	48.1
Short Circuit Current- I_{SC} (A)	16.86	16.88	16.90	16.93	16.98	17.02
Irradiance ratio (rear/front)	10%					

Power Bifaciality: 80 $\pm$ 5%.

ELECTRICAL DATA (NOCT)

Maximum Power- P_{MAX} (Wp)	434	438	442	446	450	454
Maximum Power Voltage- V_{MPP} (V)	36.3	36.5	36.8	37.1	37.3	37.6
Maximum Power Current- I_{MPP} (A)	11.97	11.99	12.00	12.02	12.05	12.08
Open Circuit Voltage- V_{OC} (V)	44.2	44.5	44.7	45.0	45.3	45.6
Short Circuit Current- I_{SC} (A)	12.58	12.59	12.61	12.64	12.67	12.70

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

MECHANICAL DATA

Solar Cells	N type
No. of cells	132 cells
Module Dimensions	2384×1134×30 mm (93.86×44.65×1.18 inches)
Weight	33.1kg (72.97lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	30mm (1.18 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: 350/280 mm (13.78/11.02 inches) Length can be customized
Connector	Staubli MC4 EVO2 / Trina Solar TS4

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C ($\pm 2^\circ\text{C}$)
Temperature Coefficient of P_{MAX}	- 0.30%/°C
Temperature Coefficient of V_{OC}	- 0.24%/°C
Temperature Coefficient of I_{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	35A

WARRANTY

15 year Product Workmanship Warranty
30 year Power Warranty
1% first year degradation
0.40% Annual Power Attenuation

(Please refer to product warranty for details)

Modules per box: 36 pieces
Modules per 40' container: 720 pieces

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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