

## 670W

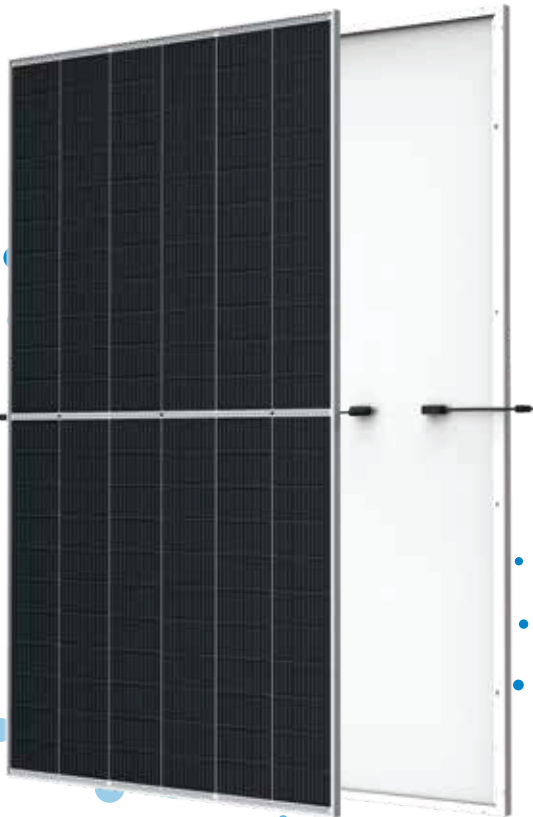
MAXIMUM POWER OUTPUT

## 0~+5W

POSITIVE POWER TOLERANCE

## 21.6 %

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



### High power Mono Perc up to 670W

- Up to 21.6% 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
- 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

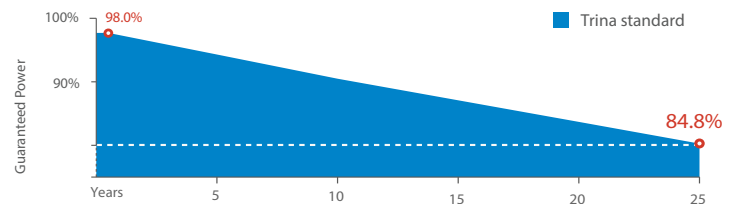
- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.34%) and operating temperature

### Comprehensive Products and System Certificates



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

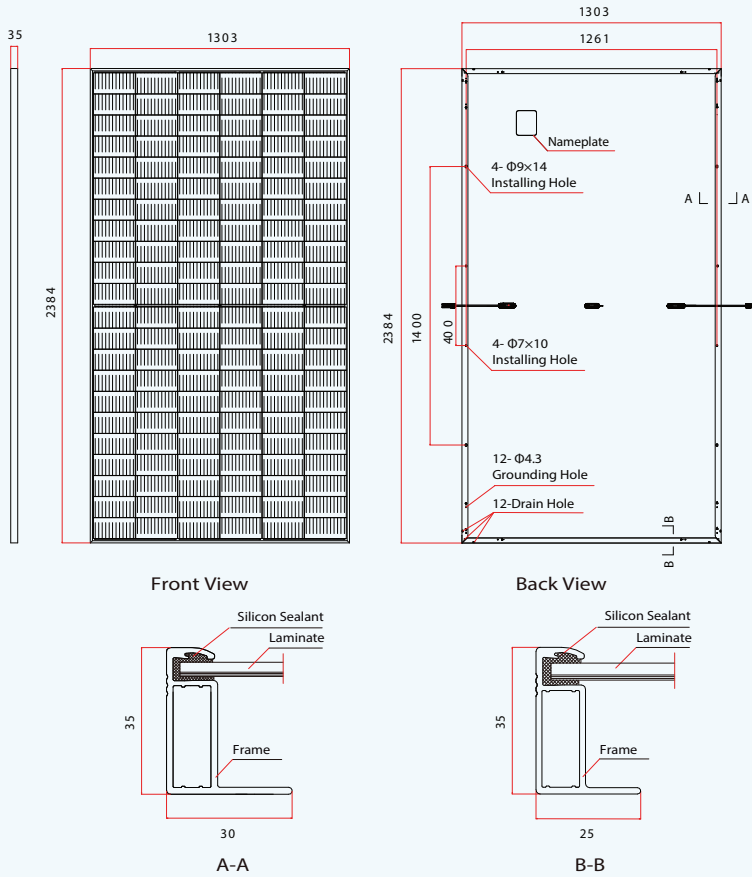
### Trina Solar's Backsheet Performance Warranty



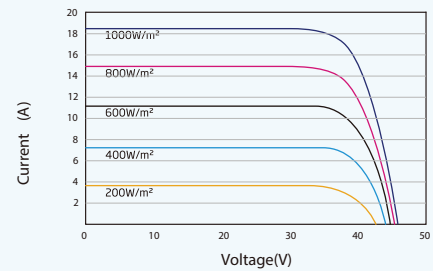
ติดต่อ..  
 ตัวแทนจำหน่าย HIP หรือ

คุณบำรุง โทร. 064-001-1902 ID line : HIPEnergy  
 คุณธรรมรัตน์ โทร. 081-234-8310 คุณธีร์ โทร. 086-340-6316  
 คุณจิระเอี๋ 02-748-1993 ต่อ 203

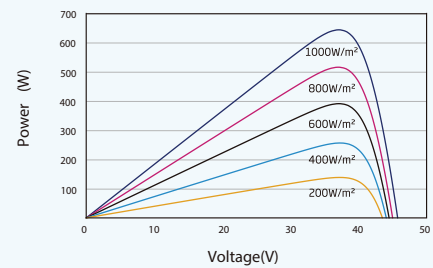
DIMENSIONS OF PV MODULE(mm)



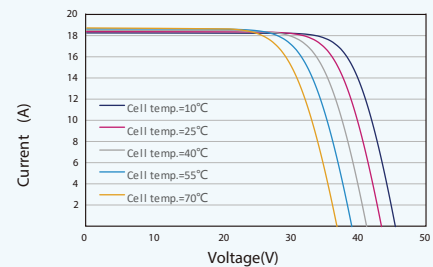
I-V CURVES OF PV MODULE(655 W)



P-V CURVES OF PV MODULE(655W)



I-V CURVES OF PV MODULE(655 W)



ELECTRICAL DATA (STC)

Peak Power Watts-P <sub>MAX</sub> (Wp)*	650	655	660	665	670
Power Tolerance-P <sub>MAX</sub> (W)			0 ~ +5		
Maximum Power Voltage-V <sub>MPP</sub> (V)	37.4	37.6	37.8	38.0	38.2
Maximum Power Current-I <sub>MPP</sub> (A)	17.39	17.43	17.47	17.51	17.55
Open Circuit Voltage-V <sub>oc</sub> (V)	45.3	45.5	45.7	45.9	46.1
Short Circuit Current-I <sub>sc</sub> (A)	18.44	18.48	18.53	18.57	18.62
Module Efficiency η <sub>m</sub> (%)	20.9	21.1	21.2	21.4	21.6

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5. \*Measuring tolerance: ±3%.

ELECTRICAL DATA (NOCT)

Maximum Power-P <sub>MAX</sub> (Wp)	492	496	500	504	508
Maximum Power Voltage-V <sub>MPP</sub> (V)	34.9	35.1	35.3	35.4	35.6
Maximum Power Current-I <sub>MPP</sub> (A)	14.09	14.13	14.17	14.22	14.26
Open Circuit Voltage-V <sub>oc</sub> (V)	42.7	42.9	43.0	43.2	43.4
Short Circuit Current-I <sub>sc</sub> (A)	14.86	14.89	14.93	14.96	15.01

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	132 cells
Module Dimensions	2384×1303×35 mm (93.86×51.30×1.38 inches)
Weight	33.3 kg (73.4 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA
Backsheet	White
Frame	35mm(1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ), Portrait: 350/280 mm(13.78/11.02 inches) Length can be customized
Connector	TS4

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P <sub>MAX</sub>	- 0.34%/°C
Temperature Coefficient of Voc	- 0.25%/°C
Temperature Coefficient of Isc	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85 °C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	30A

WARRANTY

12 year Product Workmanship Warranty  
 25 year Power Warranty  
 2% first year degradation  
 0.55% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 31 pieces  
 Modules per 40' container: 558 pieces

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