

# THE Utility MODULE



PD14

## 72 CELL

MULTICRYSTALLINE MODULE

## 300-315W

POWER OUTPUT RANGE

## 16.2%

MAXIMUM EFFICIENCY

## 0~+3%

POSITIVE POWER TOLERANCE

As a leading global manufacturer of next generation photovoltaic products, we believe close cooperation with our partners is critical to success. With local presence around the globe, 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 as the backbone of our shared success in driving Smart Energy Together.

Trina Solar Limited  
[www.trinasolar.com](http://www.trinasolar.com)

**Trina**solar  
Smart Energy Together



### Ideal for large scale installations

- High powerful footprint reduces installation time and BOS costs
- 1000V UL/1000V IEC certified



### One of the industry's most trusted modules

- Field proven performance



### Highly reliable due to stringent quality control

- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant

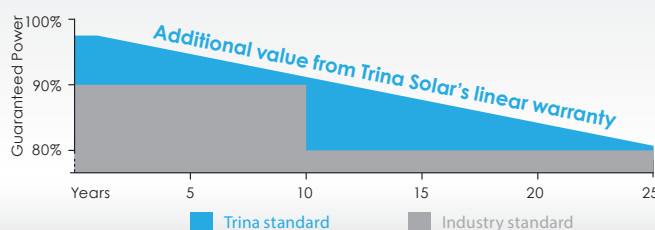


### Certified to withstand challenging environmental conditions

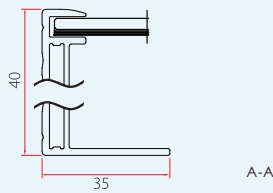
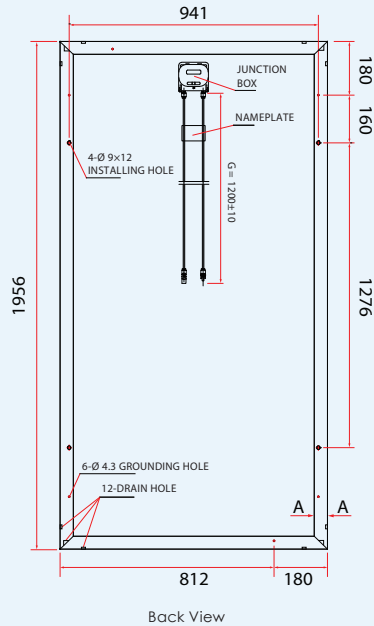
- 2400 Pa wind load
- 5400 Pa snow load
- 25 mm hail stones at 82 km/h

## LINEAR PERFORMANCE WARRANTY

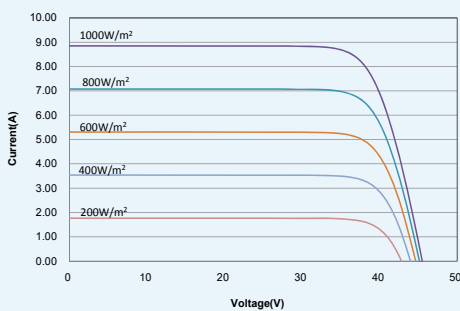
10 Year Product Warranty • 25 Year Linear Power Warranty



## DIMENSIONS OF PV MODULE unit:mm



## I-V CURVES OF PV MODULE(310W)



## CERTIFICATION



## ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}$ (Wp)	300	305	310	315
Power Output Tolerance- $P_{MAX}$ (%)	0 ~ +3			
Maximum Power Voltage- $V_{MPP}$ (V)	36.2	36.6	37.0	37.1
Maximum Power Current- $I_{MPP}$ (A)	8.28	8.33	8.38	8.51
Open Circuit Voltage- $V_{OC}$ (V)	45.4	45.5	45.5	45.6
Short Circuit Current- $I_{SC}$ (A)	8.77	8.81	8.85	9.00
Module Efficiency $\eta_m$ (%)	15.5	15.7	16.0	16.2

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
Typical efficiency reduction of 4.5% at 200 W/m² according to EN 60904-1.

## ELECTRICAL DATA (NOCT)

Maximum Power- $P_{MAX}$ (Wp)	223	227	231	235
Maximum Power Voltage- $V_{MPP}$ (V)	33.5	33.8	34.1	34.1
Maximum Power Current- $I_{MPP}$ (A)	6.66	6.72	6.77	6.88
Open Circuit Voltage- $V_{OC}$ (V)	42.1	42.2	42.2	42.3
Short Circuit Current- $I_{SC}$ (A)	7.08	7.11	7.15	7.27

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

## MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156 mm (6 inches)
Cell orientation	72 cells (6 × 12)
Module dimensions	1956 × 992 × 40 mm (77 × 39.05 × 1.57 inches)
Weight	22.5 kg (49.6lb)
Glass	3.2 mm, High Transmission, AR Coated Tempered Glass
Backsheet	White
Frame	Silver Anodized Aluminium Alloy
J-Box	IP 65 or IP 67 rated
Cables	Photovoltaic Technology cable 4.0mm² (0.006 inches²), 1200mm (47.2 inches)
Connector	MC4 Compatible

## TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	44°C (±2°C)
Temperature Coefficient of $P_{MAX}$	-0.41%/°C
Temperature Coefficient of $V_{OC}$	-0.32%/°C
Temperature Coefficient of $I_{SC}$	0.05%/°C

## MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1000VDC (IEC) 1000VDC (UL)
Max Series Fuse Rating	15A

## WARRANTY

10 year Product Workmanship Warranty

25 year Linear Power Warranty

(Please refer to product warranty for details)

## PACKAGING CONFIGURATION

Modules per box: 26 pieces

Modules per 40' container: 572 pieces