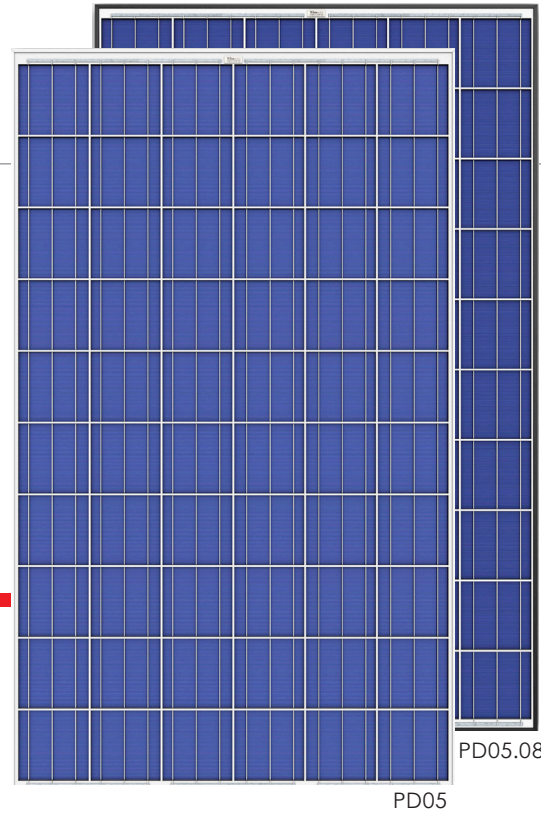


# THE Universal MODULE



**60 CELL**  
MULTICRYSTALLINE MODULE

**245-260W**  
POWER OUTPUT RANGE

**15.9%**  
MAXIMUM EFFICIENCY

**0~+3%**  
POWER OUTPUT GUARANTEE

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)



### Our most versatile product

- Compatible with all major BOS components and system designs
- 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

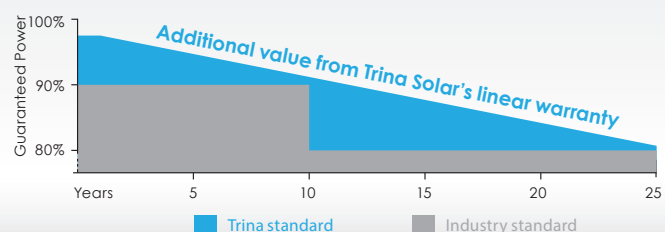


### Certified to withstand challenging environmental conditions

- 2400 Pa wind load
- 5400 Pa snow load

## LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty • 25 Year Linear Power Warranty



# THE Universal MODULE

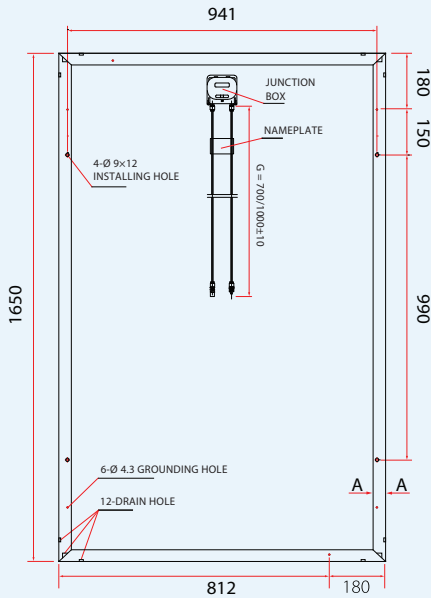
## PRODUCTS

TSM-PD05  
TSM-PD05.08

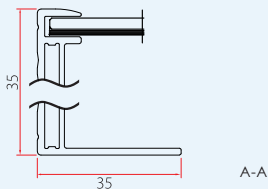
## POWER RANGE

245-260W  
245-260W

## DIMENSIONS OF PV MODULE unit:mm

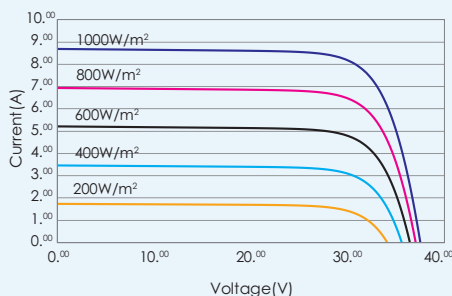


Back View

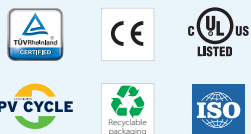


A-A

## I-V CURVES OF PV MODULE (245W)



## CERTIFICATION



## ELECTRICAL DATA (STC)

Parameter	245	250	255	260
Peak Power Watts- $P_{MAX}$ (Wp)	245	250	255	260
Power Output Tolerance- $P_{MAX}$ (%)	0 ~ +3			
Maximum Power Voltage- $V_{MPP}$ (V)	29.9	30.3	30.5	30.6
Maximum Power Current- $I_{MPP}$ (A)	8.20	8.27	8.37	8.50
Open Circuit Voltage- $V_{OC}$ (V)	37.8	38.0	38.1	38.2
Short Circuit Current- $I_{SC}$ (A)	8.75	8.79	8.88	9.00
Module Efficiency $\eta_m$ (%)	15.0	15.3	15.6	15.9

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.  
Typical efficiency reduction of 4.5% at 200 W/m<sup>2</sup> according to EN 60904-1.

## ELECTRICAL DATA (NOCT)

Parameter	182	186	190	193
Maximum Power- $P_{MAX}$ (Wp)	182	186	190	193
Maximum Power Voltage- $V_{MPP}$ (V)	27.6	28.0	28.1	28.3
Maximum Power Current- $I_{MPP}$ (A)	6.59	6.65	6.74	6.84
Open Circuit Voltage- $V_{OC}$ (V)	35.1	35.2	35.3	35.4
Short Circuit Current- $I_{SC}$ (A)	7.07	7.10	7.17	7.27

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

## MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156 mm (6 inches)
Cell orientation	60 cells (6 × 10)
Module dimensions	1650 × 992 × 35 mm(64.95 x 39.05 x 1.37 inches)
Weight	18.6 kg (41lb)
Glass	3.2 mm(0.13 inches),High Transmission, AR Coated Tempered Glass
Backsheet	White
Frame	Silver Anodized Aluminium Alloy (PD05); Black(PD05.08)
J-Box	IP 65 or IP 67 rated
Cables	Photovoltaic Technology cable 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ), 700 mm(27.56 inches)/1000mm(39.37inches)
Connector	MC4

## 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	1000V DC(IEC) 1000V DC (UL)
Max Series Fuse Rating	15A

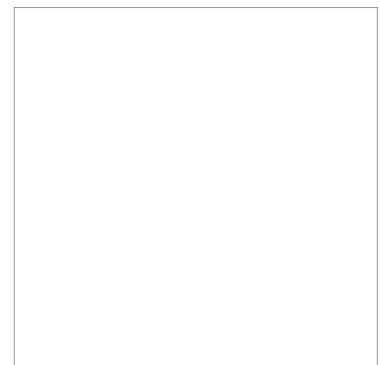
## WARRANTY

10 year Product Workmanship Warranty  
25 year Linear Power Warranty

(Please refer to product warranty for details)

## PACKAGING CONFIGURATION

Modules per box: 30 pieces  
Modules per 40' container: 840 pieces



TSM\_EN\_August\_2014\_A(US)