



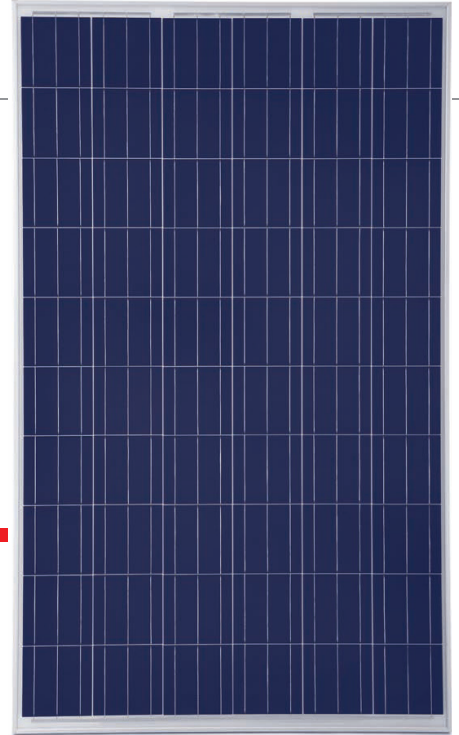
### **Origin4000F 4.0kW Solar System Panel Specifications**

Your Origin system will be supplied with one of the following sets of panels:

<b>Manufacturer</b>	<b>Mono Or Poly</b>	<b>Size (Watts)</b>	<b>Panels Required To Achieve Minimum 4000 Watts</b>
Trina	Poly	250	16

Please note all solar panels supplied are CEC accredited and compliant with IEC/EN61730 and IEC/EN61215 or IEC/EN61646.

Please see the following specification sheet for further details and panel specifications.



# TSM-PC05A TSM-PA05A

## THE Honey MODULE

by **Trina**solar

**15.9%**  
MAX EFFICIENCY

**260W**  
MAX POWER OUTPUT

**10 YEAR**  
PRODUCT WARRANTY

**25 YEAR**  
LINEAR POWER WARRANTY

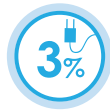
Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, involved in the production of ingots, wafers and cells to the assembly of high quality modules, using both mono and multicrystalline technologies. As of July 2011, the Company has already achieved an annualized nameplate module capacity of approximately 1.9GW. Trina Solar's wide range of products are used in residential, commercial, industrial and public utility applications throughout the world.

Only by matching an efficient cost-structure with proven performance will we as an industry achieve grid parity. And at Trina Solar, we have both.

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



Module can bear snow loads up to **5400Pa** and wind loads up to **2400Pa**



Guaranteed power output **0~+3%**



High performance under low light conditions  
**Cloudy days, mornings and evenings**



Independently certified by **international certification bodies**

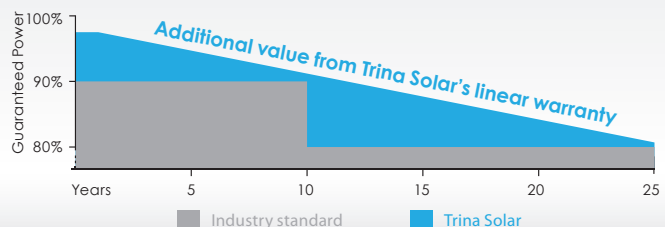


Manufactured according to International Quality and Environment Management System Standards **ISO9001, ISO14001**

### LINEAR PERFORMANCE WARRANTY

NEW

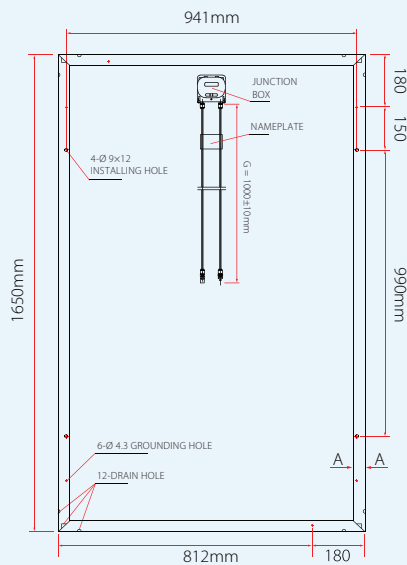
10 Year Product Warranty • 25 Year Linear Power Warranty



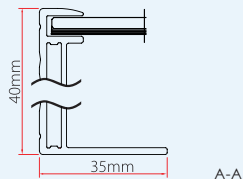
# TSM-PC05A / TSM-PA05A THE Honey MODULE

by **Trina**

## DIMENSIONS OF PV MODULE TSM-PC/PA 05A

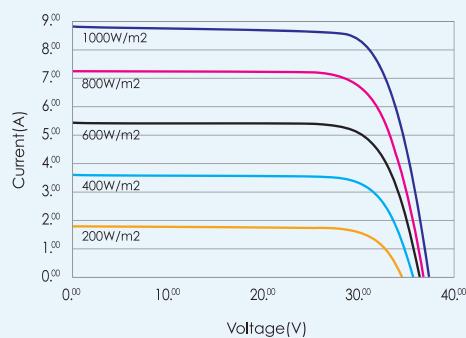


Back View



A-A

## I-V CURVES OF PV MODULE TSM-250 PC/PA 05A



Average efficiency reduction of 4.5% at 200W/m<sup>2</sup> according to EN 60904-1.

## CERTIFICATION



ELECTRICAL DATA @ STC	TSM-245 PC/PA05A	TSM-250 PC/PA05A	TSM-255 PC/PA05A	TSM-260 PC/PA05A
Peak Power Watts- $P_{MAX}$ (Wp)	245	250	255	260
Power Output Tolerance- $P_{MAX}$ (%)	0/+3	0/+3	0/+3	0/+3
Maximum Power Voltage- $V_{MP}$ (V)	30.2	30.5	30.9	31.3
Maximum Power Current- $I_{MPP}$ (A)	8.12	8.20	8.26	8.31
Open Circuit Voltage- $V_{OC}$ (V)	37.7	37.8	38.0	38.2
Short Circuit Current- $I_{SC}$ (A)	8.83	8.90	8.95	9.02
Module Efficiency $\eta_m$ (%)	15.0	15.3	15.6	15.9

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C).

ELECTRICAL DATA @ NOCT	TSM-245 PC/PA05A	TSM-250 PC/PA05A	TSM-255 PC/PA05A	TSM-260 PC/PA05A
Maximum Power (W)	180	183	187	191
Maximum Power Voltage (V)	27.4	27.7	28.0	28.2
Maximum Power Current (A)	6.56	6.62	6.68	6.76
Open Circuit Voltage (V)	34.6	34.8	34.9	35.1
Short Circuit Current (A)	7.14	7.20	7.24	7.30

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

## MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156mm (6 inches)
Cell orientation	60 cells (6 × 10)
Module dimension	1650 × 992 × 40mm (64.95 × 39.05 × 1.57 inches)
Weight	19.5kg (43.0 lb)
Glass	High transparency solar glass 3.2mm (0.13 inches)
Frame	Anodized aluminium alloy
J-Box	IP 65 rated
Cables / Connector	Photovoltaic Technology cable 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ), 1000mm (39.4 inches), MC4

## TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	46°C (±2°C)
Temperature Coefficient of $P_{MAX}$	-0.41%/°C
Temperature Coefficient of $V_{OC}$	-0.32%/°C
Temperature Coefficient of $I_{SC}$	0.053%/°C

## MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1000V DC(IEC)/600V DC(UL)
Max Series Fuse Rating	15A

## WARRANTY

- 10 year workmanship warranty
  - 25 year linear performance warranty
- (Please refer to product warranty for details)

## PACKAGING CONFIGURATION

- Modules per box: 25 pcs
- Modules per 40' container: 650 pcs

TSM\_EN\_Dec\_2011