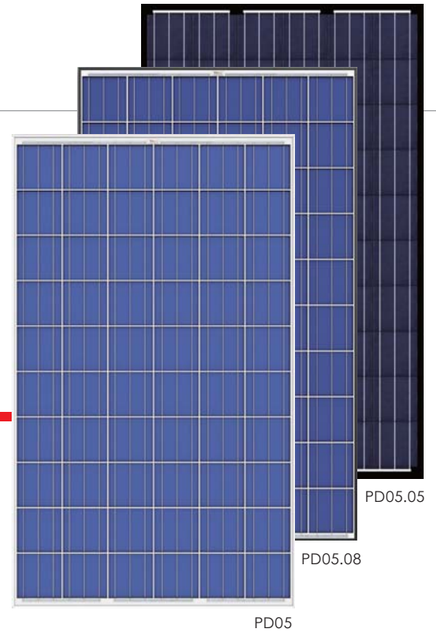
Mono **Multi** Solutions

THE Universal MODULE



60 CELL
MULTICRYSTALLINE MODULE

245-265W
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

Trinasolar
Smart Energy Together

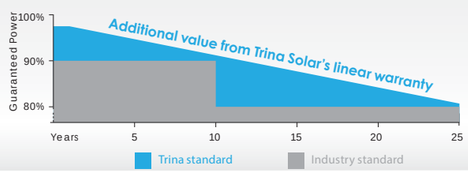
Our most versatile product
- Compatible with all major BOS components and system designs
- 1000V UL/1000V IEC certified

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

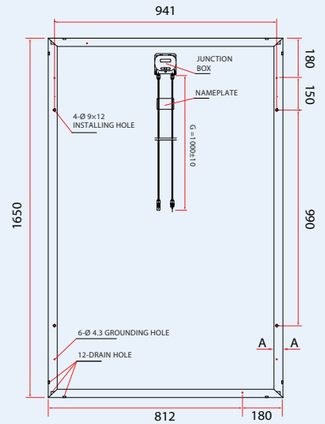
LINEAR PERFORMANCE WARRANTY
10 Year Product Warranty • 25 Year Linear Power Warranty



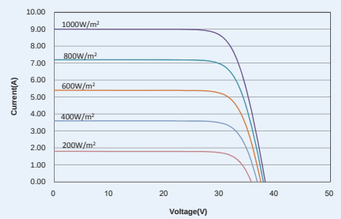
THE Universal MODULE

PRODUCTS	POWER RANGE
TSM-PD05	250-265W
TSM-PD05.08	250-265W
TSM-PD05.05	245-260W

DIMENSIONS OF PV MODULE
unit:mm



I-V CURVES OF PV MODULE (260W)



CERTIFICATION

ELECTRICAL DATA (STC)

Peak Power Watts-P_{MAX} (Wp)	245	250	255	260	265
Power Output Tolerance-P_{MAX} (%)	0 ~ +3				
Maximum Power Voltage-V_{MPP} (V)	29.9	30.3	30.5	30.6	30.8
Maximum Power Current-I_{MPP} (A)	8.20	8.27	8.37	8.50	8.61
Open Circuit Voltage-V_{OC} (V)	37.8	38.0	38.1	38.2	38.3
Short Circuit Current-I_{SC} (A)	8.75	8.79	8.88	9.00	9.10
Module Efficiency η_m (%)	15.0	15.3	15.6	15.9	16.2

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

ELECTRICAL DATA (NOCT)

Maximum Power-P_{MAX} (Wp)	182	186	190	193	197
Maximum Power Voltage-V_{MPP} (V)	27.6	28.0	28.1	28.3	28.4
Maximum Power Current-I_{MPP} (A)	6.59	6.65	6.74	6.84	6.93
Open Circuit Voltage-V_{OC} (V)	35.1	35.2	35.3	35.4	35.5
Short Circuit Current-I_{SC} (A)	7.07	7.10	7.17	7.27	7.35

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	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(PD05&PD05.08); Black(PD05.05)
Frame	Silver Anodized Aluminium Alloy (PD05); Black(PD05.08&PD05.05)
J-Box	IP 65 or IP 67 rated
Cables	Photovoltaic Technology cable 4.0mm² (0.006 inches²), 1000mm(39.37inches)
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	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_March_2015_A

Trinasolar
Smart Energy Together

CERTIFICATE OF COMPLIANCE

Certificate Number 20140630-E306515
Report Reference E306515- 20121213
Issue Date 2014-JUNE-30

Issued to: TRINA SOLAR LTD
2 TIAN HE RD, ELECTRONICS PARK NEW DISTRICT, CHANGZHOU, JIANGSU 213031 CHINA,

This is to certify that representative samples of PHOTOVOLTAIC MODULES AND PANELS WITH SYSTEM VOLTAGE RATINGS OVER 600 VOLTS
Refer to addendum page for Models

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1703 - Standard for Safety for Flat-Plate Photovoltaic Modules and Panels and ULC ORD/C1703-01 - Flat-Plate Photovoltaic Modules and Panels.

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.
The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: c UL us the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number 20140630-E306515
Report Reference E306515- 20121213
Issue Date 2014-JUNE-30

The modules with the specified construction as below may be marked with its type for UL listed fire performance products only as the below table:

Module model	Specific construction	Marking
TSM-xxxPD05, TSM-xxxPD05.08	Superstrate: 3.2~4.36mm thick; EVA: 0.25~0.61mm thick; Substrate: 0.30 mm ~ 0.64 mm thick; Frame: Cross sectional dimension: 35 x 35mm, Height: 35mm, Thickness: 1.5mm	Module Fire Performance: Type 1
TSM-xxxPD05, TSM-xxxPD05.05, TSM-xxxPD05.08	Superstrate: 3.2~4.36mm thick; EVA: 0.25~0.61mm thick; Substrate: 0.284 mm ~ 0.30 mm thick; Frame: Cross sectional dimension: 35 x 35mm, Height: 35mm, Thickness: 1.5mm	Module Fire Performance: Type 2
TSM-xxxPD14, TSM-xxxPD14.08	Superstrate: 3.2~4.36mm thick; EVA: 0.25~0.65mm thick; Substrate: 0.284 mm ~ 0.300 mm thick; Frame: Cross sectional dimension: 40*35 mm, Height: 40mm, Thickness: 1.5 mm	Module Fire Performance: Type 8
TSM-XXXPD05.10 TSM-XXXPD05.18	Superstrate: 3.2~4.36mm thick; EVA: 0.25~0.65 mm thick; Substrate: 0.025 ~ 0.284 mm thick; Frame: Cross sectional dimension: 40* 38 mm, Height: 40mm, Thickness: 1.8mm	Module Fire Performance: Type 5

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

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