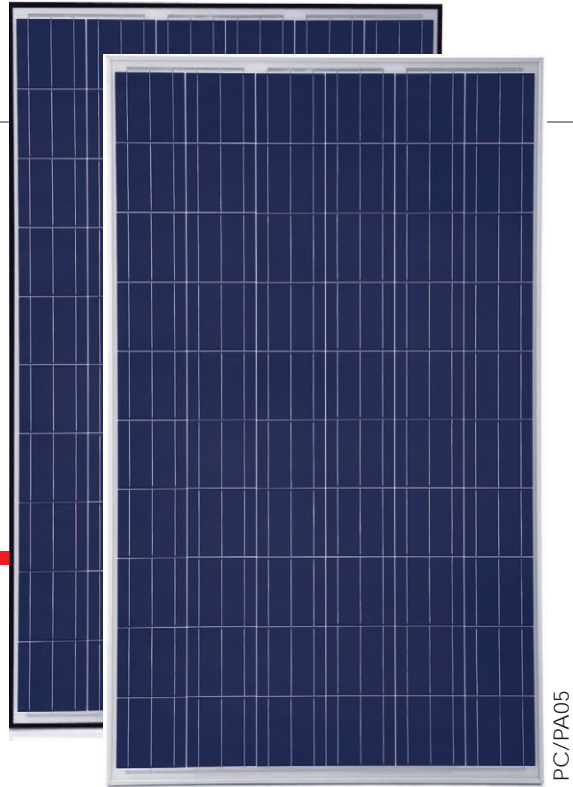


TSM-PC05 TSM-PA05 THE UNIVERSAL SOLUTION



15.0%
MAX EFFICIENCY

245W
MAX POWER OUTPUT

10 YEAR
PRODUCT WARRANTY

25 YEAR
LINEAR POWER WARRANTY

Founded in 1997, Trina Solar (NYSE: TSL) has established itself as a leader in the solar community with its vertically integrated business model. Our modules and system solutions provide clean solar power in on-grid and off-grid residential, commercial, industrial and utility-scale systems.

With more than 22 offices worldwide, Trina Solar has partnerships with leading installers, distributors, utilities and developers in all major PV markets. Trina Solar is committed to driving smarter energy choices.

Trina Solar Limited
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



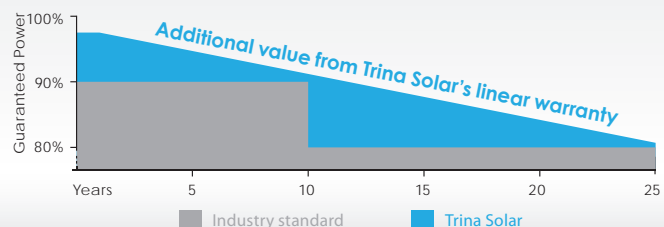
Manufactured according to International Quality and Environment Management System Standards **ISO9001, ISO14001**



MC4 photovoltaic connectors increase system reliability

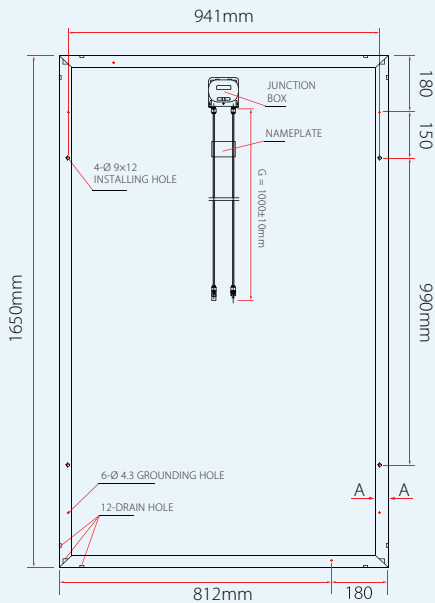
LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty • 25 Year Linear Power Warranty

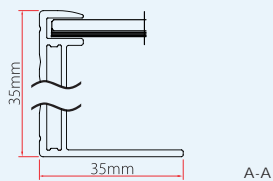


TSM-PC05 / TSM-PA05 THE UNIVERSAL SOLUTION

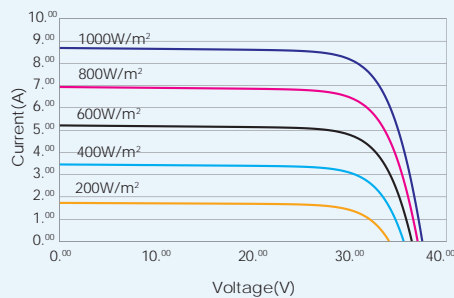
DIMENSIONS OF PV MODULE TSM-PC/PA05



Back View



I-V CURVES OF PV MODULE TSM-245 PC/PA05



Average efficiency reduction of 4.5% at 200W/m² according to EN 60904-1.

CERTIFICATION



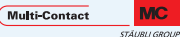
ELECTRICAL DATA @ STC	TSM-230 PC/ PA05	TSM-235 PC/ PA05	TSM-240 PC/ PA05	TSM-245 PC/ PA05
Peak Power Watts- P_{MAX} (Wp)	230	235	240	245
Power Output Tolerance- P_{MAX} (%)	0/+3	0/+3	0/+3	0/+3
Maximum Power Voltage- V_{MP} (V)	29.2	29.3	29.7	30.2
Maximum Power Current- I_{MPP} (A)	7.90	8.03	8.10	8.13
Open Circuit Voltage- V_{OC} (V)	37.1	37.2	37.3	37.5
Short Circuit Current- I_{SC} (A)	8.53	8.55	8.62	8.68
Module Efficiency η_m (%)	14.1	14.4	14.7	15.0

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C). Power measurement tolerance: $\pm 3\%$

ELECTRICAL DATA @ NOCT	TSM-230 PC/ PA05	TSM-235 PC/ PA05	TSM-240 PC/ PA05	TSM-245 PC/ PA05
Maximum Power- P_{MAX} (Wp)	167	171	174	178
Maximum Power Voltage- V_{MP} (V)	26.3	26.4	26.6	26.8
Maximum Power Current- I_{MPP} (A)	6.35	6.48	6.55	6.64
Open Circuit Voltage (V)- V_{OC} (V)	33.9	34.0	34.1	34.2
Short Circuit Current (A)- I_{SC} (A)	6.95	6.97	7.04	7.10

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s. Power measurement tolerance: $\pm 3\%$

MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156mm (6 inches)
Cell orientation	60 cells (6 × 10)
Module dimensions	1650 × 992 × 35mm (64.95 × 39.05 × 1.37 inches)
Weight	18.6kg (41.0 lb)
Glass	High transparency solar glass 3.2mm (0.13 inches)
Frame	Anodized aluminium alloy
J-Box	IP 65 rated
Cables	Photovoltaic Technology cable 4.0mm ² (0.006 inches ²), 1000mm (39.4 inches)
Connector	Original MC4 

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	45°C ($\pm 2^\circ\text{C}$)
Temperature Coefficient of P_{MAX}	-0.43%/°C
Temperature Coefficient of V_{OC}	-0.32%/°C
Temperature Coefficient of I_{SC}	0.047%/°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 Product Workmanship Warranty

25 year Linear Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 29 pieces

Modules per 40' container: 812 pieces

