

# TSM-DA01

## The Universal Solution



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



Guaranteed power output (0~+3%)



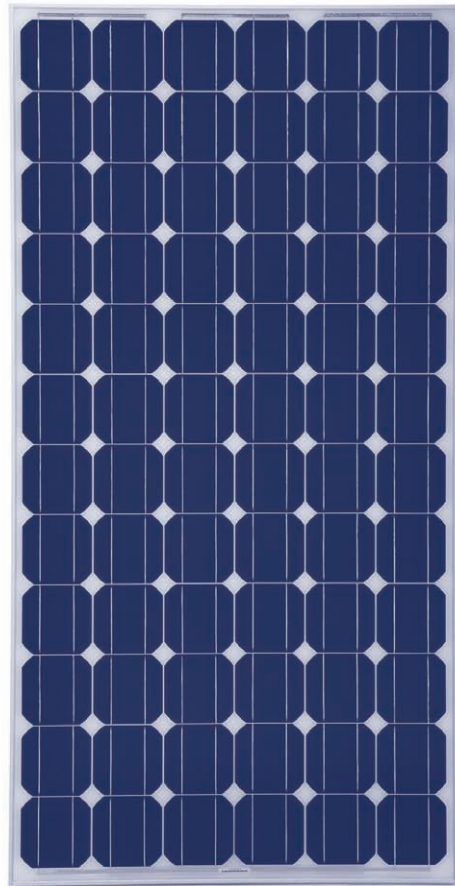
High performance under low light conditions (Cloudy days, mornings and evenings)



Independently certified by international certification bodies\*



Manufactured according to International Quality and Environment Management System (ISO9001, ISO14001)

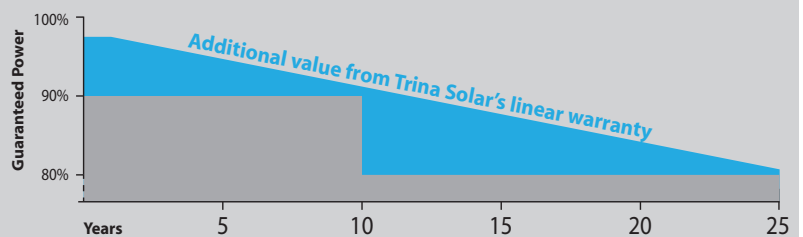


One of the world's most reliable panels, tested and proven by internationally renowned institutions such as the TUV Rheinland and the Desert Knowledge Australia Center. Satisfying our customers all around the globe, the TSM-DA01 is suitable for all types of installations, from remote off-grid systems to large urban commercial rooftops and large ground-mounted projects.



**linear performance warranty**

**10 year product warranty**  
**25 year linear power warranty**



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USA

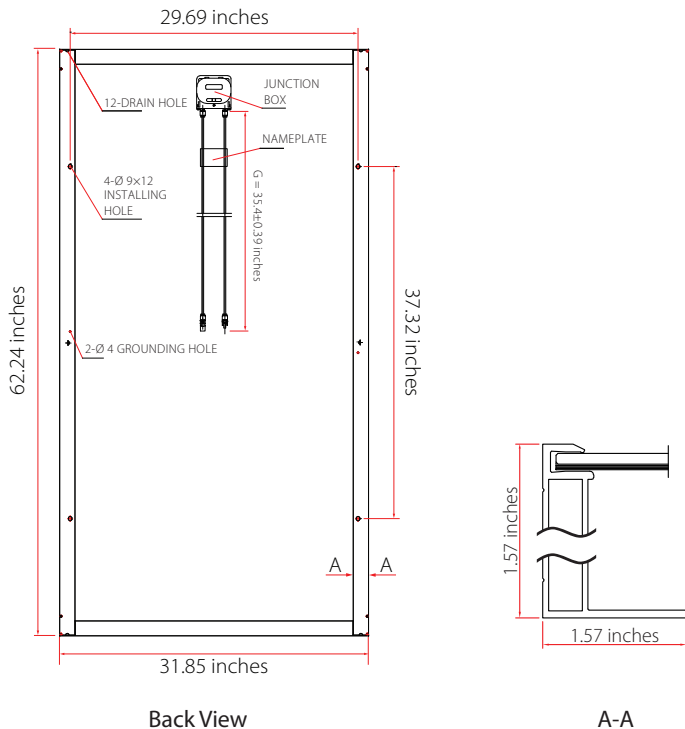
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Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, producing everything from ingots to modules, using both mono and multicrystalline technologies. By the end of 2011, the company will have a nameplate module capacity of 1.9GW. Trina Solar's wide range of products are used in residential, commercial, industrial and public utility applications throughout the world.

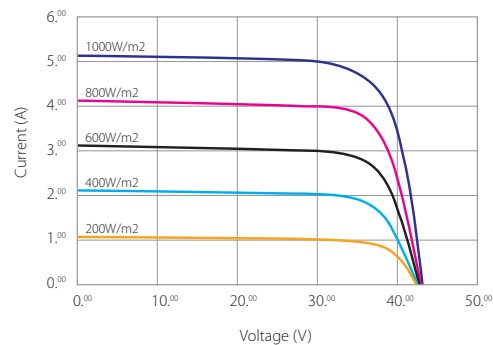
Only by matching an efficient cost-structure with proven performance will we, as an industry, achieve grid parity. And at Trina Solar, we have both.

# TSM-DA01 The Universal Solution

## Dimensions of PV module TSM-DA01



## I-V Curves of PV module TSM-180DA01



Efficiency	up to 14.5%
Wattage	up to 185W
Years warranty	25

## Certification



Electrical Data @ STC	TSM-175DA01	TSM-180DA01	TSM-185DA01
Peak Power Watts- $P_{MAX}$ (WP)	175	180	185
Power Output Tolerance- $P_{MAX}$ (%)	0/+3	0/+3	0/+3
Maximum Power Voltage- $V_{MAX}$ (V)	36.2	36.8	37.5
Maximum Power Current- $I_{MPP}$ (A)	4.85	4.90	4.95
Open Circuit Voltage- $V_{OC}$ (V)	43.9	44.2	44.5
Short Circuit Current- $I_{SC}$ (A)	5.30	5.35	5.40
Module Efficiency $\eta_m$ (%)	13.7	14.1	14.5

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

## Mechanical Data

Solar cells	Monocrystalline 5 inches (125 x 125mm)
Cells orientation	72 cells (6x12)
Module dimension	62.24 x 31.85 x 1.57inches (1581 x 809 x 40mm)
Weight	34.4lb (15.6kg)
Glass	High transparency solar glass 0.13inches (3.2mm)
Frame	Anodized aluminium alloy
J-Box	IP 65 rated
Cables/Connector	Photovoltaic Technology cable 0.006inches <sup>2</sup> (4.0mm <sup>2</sup> ), 35.4inches (900mm), MC4

## Temperature Ratings

Nominal Operating Cell Temperature (NOCT)	46°C (±2°C)
Temperature Coefficient of $P_{MPP}$	- 0.45%/°C
Temperature Coefficient of $V_{OC}$	- 0.35%/°C
Temperature Coefficient of $I_{SC}$	0.05%/°C

## Maximum Ratings

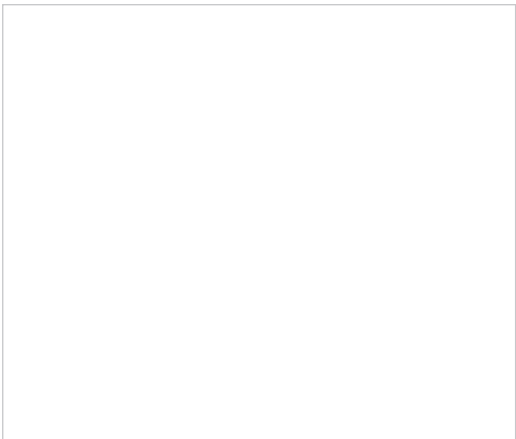
Operational Temperature	-40~+85°C
Maximum System Voltage	600VDC
Max Series Fuse Rating	10A

## Warranty

10 years workmanship warranty  
 25 years linear performance warranty  
 (Please refer to Trina Solar product warranty for details)

## Packaging Configuration

Modules per box	23 pcs
Modules per 40' container	644 pcs



TSM\_US\_2011\_RevB