

# TSM-DC01

## The Universal Solution



Easy installation and handling for various applications



Module can bear snow loads (5400PA) and wind loads (2400PA)



Guaranteed power output (0~+3%)



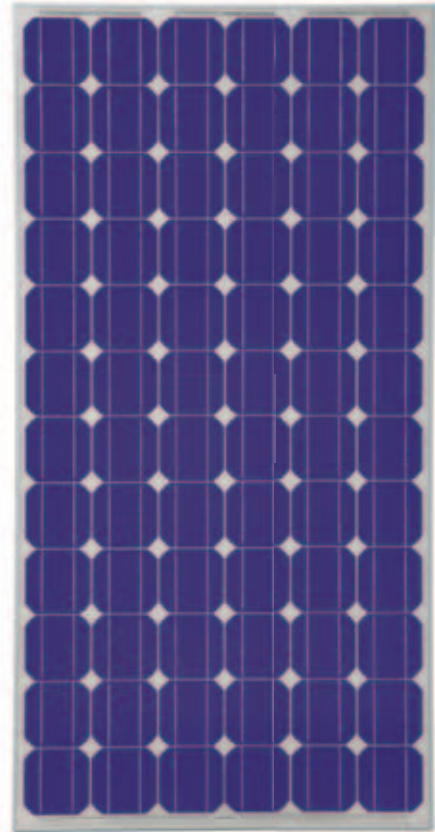
High performance under low light conditions (Cloudy days, mornings and evenings)



Independently certified by international certification body\*



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



Trina Solar's best selling panel since 2004. 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-DC01 works in any type of installation, from off-grid systems in Tibet to large commercial rooftops in New Jersey and ground-mounted projects in the Australian desert.

Trina Solar, **the best €/kWh** value under the sun



### Trina Solar Limited

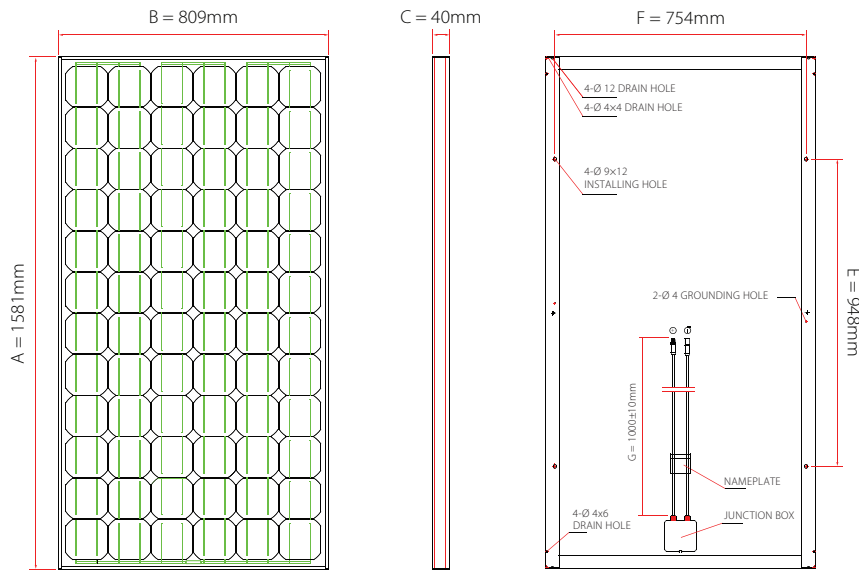
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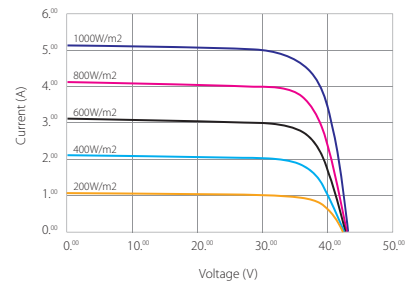
Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, producing everything from ingots to modules, using both mono and multicrystalline technologies. At the end of 2010, the company will have a nameplate module capacity of 950MW. Trina Solar's wide range of products are used in residential, 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.

Dimensions of PV module TSM-DC01



I-V Curves of PV module TSM-180DC01



Efficiency	up to 14.5
Wattage	up to 185
Years warranty	25

Certification



Electrical Data @ STC	TSM-175DC01	TSM-180DC01	TSM-185DC01
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
Encapsulated Cell Efficiency $\eta_c$ (%)	16.4	16.8	17.3
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)

General Data

Cell Type	125 x 125mm Monocrystalline silicon, 72pcs (6x12)
Glass	High Transmission, Low Iron, Tempered Glass 3.2mm
Frame	Anodized Aluminum
J-Box / Connector	1. Tyco / Tyco or MC4, IP65 2. Renhe / 05-1 or MC4, IP65

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

Mechanical and Packing Configuration

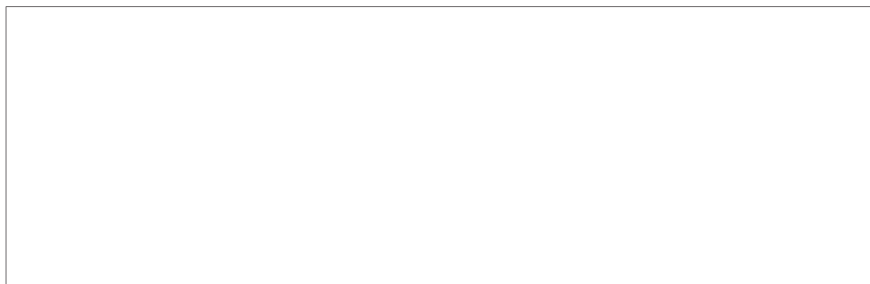
Dimensions (A x B X C)	1581 x 809 x 40mm
Installation Hole Dimensions (E x F)	948 x 754mm
Cable length (G)	1000mm
Weight	15.6kg
Packing Configuration	23pcs/carton
Quantity/Pallet	1 carton/pallet
Loading Capacity	644pcs/40ft, 276pcs/20ft

Maximum Ratings

Operating Temperature	-40 ~ +85°C
Storage Temperature	-40 ~ +85°C
Maximum System Voltage	1000VDC
Maximum Series Fuse	10A

Warranty

5 years manufacturing warranty
10 years warranty, 90% power output
25 years warranty, 80% power output



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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